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FERTILIZER REPORT

1940



JOHN H. LIGHT
Secretary of Agriculture

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FERTILIZER REPORT--1940

INTRODUCTION

All products intended for fertilizing purposes are required to be registered annually in accordance with the provisions of the Pennsylvania Fertilizer Law, Act of May 1, 1909, as amended. The dung of domestic animals, marl, lime, and wood ashes are exempt.

Section I requires the following information to be shown on sacks or attached cards: (a) The number of pounds of fertilizer contained in the package; (b) the name, brand, or trade mark under which the fertilizer is sold; (c) the name and principal address of the manufacturer, importer, or other person putting the fertilizer on the market in this Commonwealth; (d) guarantee for nitrogen; (e) guarantee for total phosphoric acid, except in mixed and superphosphate fertilizers; (f) guarantee for available phosphoric acid; (g) guarantee for potash soluble in distilled water.

All mixed fertilizers are required to contain at least sixteen units of plant food based upon guarantees for nitrogen, available phosphoric acid, and water soluble potash, and which guarantees must be stated in even units.

Applications for registration are forwarded to each licensed manufacturer at the end of the calendar year, and it is necessary to report on same the preceding year's tonnage sales of each brand in order that license or registration fee can be properly computed. Tonnage sales are likewise required for brands even though they are not to be re-registered.

The Agents of the Bureau of Foods and Chemistry are authorized to obtain official samples which, together with reports giving full information for each individual sample, are forwarded direct to the Laboratory where a check of records is made to determine whether the brands are registered. Where it is found that these official samples are duly registered, an analysis is conducted to ascertain whether or not the fertilizer meets its guaranteed analysis.

During the year 1940, the Agents of the Department collected 1,085 official samples, and of this number, 1,065, representing 451 brands, registered by 47 manufacturers, were subjected to analysis and classified as follows:

	BRANDS	SAMPLES
Complete Fertilizers.....	324	784
Ground Bone Fertilizers.....	14	19
Superphosphate Fertilizers.....	52	159
Lime Phosphate Fertilizers.....	10	12
Rock and Potash Fertilizers.....	42	82
Miscellaneous Fertilizers.....	9	9
Total	451	1065

BRANDS REGISTERED AND TONNAGE SALES

The registration fee for each new brand of fertilizer is \$15, and where old brands are to be re-registered, the scale of fees is as follows: 0 to 150 tons, \$15; over 150 tons to 250 tons, \$20; over 250 tons to 400 tons, \$30; over 400 tons to 500 tons, \$40; over 500 tons, \$50.

Licenses were issued to 120 manufacturers to cover sales of their brands for the year 1940. These licenses included 1,033 brands of which 801 were mixed fertilizers and 232 so-called "base" materials such as nitrate of soda, sulphate of ammonia, bone, etc.

The 1940 applications for registration showed that 357,875 tons of all classes of fertilizers were sold during the year 1939 (compared with 358,467 tons sold during 1938) and classified as follows: Complete Fertilizers, 247,374 tons; Ground Bone Fertilizers, 2,844 tons; Superphosphate Fertilizers, 85,209 tons; Lime Phosphate Fertilizers, 4,578 tons; Ammoniated Phosphate Fertilizers, 14 tons; Rock and Potash Fertilizers, 11,477 tons; and Miscellaneous Fertilizers, including the following: Tankage, 1,348 tons; Dried Blood, 6 tons; Nitrate of Soda, 120 tons; Potash Salts, 668 tons; Sulphate of Ammonia, 561 tons; and unclassified 3,676 tons.

The 1939 tonnage figure reveals that there were supplied 8,136 tons of nitrogen, 45,297 tons of available phosphoric acid, and 16,871 tons of water soluble potash, or a total of 70,304 tons of plant food. The amount of plant food is in excess of that supplied during the year 1938, namely, 68,908 tons.

CONCLUSIONS

Of the 1,065 official samples analyzed, 111 or 10.42% were found to be deficient in one or more elements of plant food, to the extent of .2% or more. The proportion of deficiencies is lower than that reported for the year 1939.

Considering the plant food elements separately, 30 samples or 3.71% were found to be deficient in nitrogen, 32 or 3.02% deficient in phosphoric acid, and 60 or 6.90% deficient in water soluble potash.

Of the total number of fertilizers analyzed, 784 were complete fertilizers and 98 or 12.50% were found to be deficient, 30 or 3.83% deficient in nitrogen, 30 or 3.83% in available phosphoric acid, and 49 or 6.25% in water soluble potash.

The Law requires that when the word "tobacco" is used as a part of the brand name, the potash content must be in a form other than chloride.

There were no deficiencies noted in the Ground Bone Fertilizers, Superphosphate Fertilizers, and Lime Phosphate Fertilizers, while twelve samples were found to be deficient in water soluble potash in the Rock and Potash group. In the Miscellaneous Fertilizers one sample was found to be deficient in potash.

The average unit values, estimated from the average retail selling prices, were as follows: Nitrogen \$2.80, Available Phosphoric Acid \$1.01, Water Soluble Potash \$1.49.

The average retail selling price for Complete Fertilizers was \$31.09 a ton, compared with \$30.23 for 1939.

It is noted that 10.42% of all samples collected during the year 1940 were found to be deficient, which deficiency is lower than the previous year's inspection. In most instances the deficiencies were balanced by overages in other elements. Where the deficiencies were found to be of a serious nature, prosecution was instituted.

TABLE I--DEFICIENCIES

CLASS OF FERTILIZERS	SAMPLES	Number Deficient in		
		NITROGEN	AVAILABLE PHOSPHORIC ACID	POTASH
Complete Fertilizers.....	784	30	30	49
Ground Bone Fertilizers.....	19	--	--	--
Superphosphate Fertilizers...	159	--	--	--
Lime Phosphate Fertilizers...	12	--	--	--
Rock and Potash Fertilizers..	82	--	2	10
Miscellaneous Fertilizers....	9	--	--	1
Total.....	1065	30	32	60

TABLE II--AVERAGE ANALYSES AND RETAIL PRICES

FORM OF PLANT FOOD	COMPLETE FERTILIZERS	GROUND BONE FERTI- LIZERS	SUPERPHOS- PHATE FERTI- LIZERS*	ROCK AND POTASH FERTI- LIZERS
	Per Cent	Per Cent	Per Cent	Per Cent
Nitrogen.....	3.38	3.62	----	----
Total Phosphoric Acid.....	----	23.77	----	----
Available Phosphoric Acid..	11.50	----	20.24	14.87
Potash.....	6.73	----	----	8.51
Selling Price 1940.....	\$31.09	\$46.40	\$20.40	\$27.66
Selling Price 1939.....	\$30.23	\$43.75	\$20.02	\$25.76

*Excluding Lime Phosphate

KEY TO TABLES

The following tables include the results of chemical analyses of the official samples. Each sample was given a chemist's number and analyzed for the element or elements guaranteed.

The asterisk (*) indicates those samples found to be deficient to the extent of .2% or more.

Table III. Complete Fertilizers, furnishing Nitrogen, Available Phosphoric Acid, and Potash.

Table IV. Ground Bone Fertilizers, furnishing Nitrogen and Total Phosphoric Acid.

Table V. Superphosphate and Lime Phosphate Fertilizers, furnishing Available Phosphoric Acid.

Table VI. Rock and Potash Fertilizers, furnishing Available Phosphoric Acid and Potash.

Table VII. Miscellaneous Fertilizers, including Nitrate of Soda, Sulphate of Ammonia, Muriate of Potash, Tankage, and Milorganite.

WARNING

"Section 5. Any person or persons selling, offering, or exposing for sale, any commercial fertilizer or any brand of the same, having a distinct trade-name, without the analysis required by section one of this act, or with an analysis stating that it contains a larger percentage of any one or more of the above-named constituents than is contained therein, or for the sale of which all the provisions of sections two and three have not been complied with, or any person violating any of the provisions of section four of this act, shall be guilty of a misdemeanor, and, on conviction, shall be sentenced to pay a fine of not less than twenty-five nor more than one hundred dollars for the first offense, and not less than two hundred dollars for each subsequent offense....."

The Department of Agriculture, as the agency charged by the Legislature with the enforcement of the provisions of the Fertilizer Law, copies of which are available upon request, insists upon strict compliance therewith.

*Act of May 1, 1909, P. L. 344 as amended.

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
THE ACME GUANO CO., Baltimore, Md.							
Acme 2-9-5 (5288)	2.12	2.00	9.24	9.00	*4.58	5.00	-----
Acme 2-9-5 (5740)	2.01	2.00	9.44	9.00	5.29	5.00	-----
Acme 2-12-4 (5286)	2.10	2.00	12.46	12.00	4.05	4.00	-----
Acme 2-12-6 (5290)	2.51	2.00	12.00	12.00	6.19	6.00	-----
Acme 3-12-6 (5285)	*2.67	3.00	13.43	12.00	*5.68	6.00	-----
Acme 3-12-6 (5658)	3.18	3.00	11.91	12.00	6.61	6.00	-----
Acme 4-8-8 (5289)	3.85	4.00	8.05	8.00	9.28	8.00	-----
THE AMERICAN AGRICULTURAL CHEMICAL CO., New York, N. Y.							
AA Calvert Tobacco Fertilizer 3-8-15 (5428)	3.27	3.00	8.14	8.00	15.02	15.00	-----
AA Champion Fertilizer 2-9-5 (5151)	2.20	2.00	9.27	9.00	5.12	5.00	-----
AA Champion Fertilizer 2-9-5 (5206)	2.06	2.00	*8.57	9.00	5.44	5.00	-----
AA Champion Fertilizer 2-9-5 (5252)	2.13	2.00	9.02	9.00	5.01	5.00	-----
AA Champion Fertilizer 2-9-5 (5396)	2.15	2.00	9.19	9.00	5.58	5.00	-----
AA Champion Fertilizer 2-9-5 (5458)	2.17	2.00	9.41	9.00	5.12	5.00	-----
AA Champion Fertilizer 2-9-5 (6122)	2.00	2.00	9.41	9.00	5.00	5.00	-----
AA Champion Fertilizer 2-9-5 (6126)	2.11	2.00	9.14	9.00	5.45	5.00	-----
AA Climax Fertilizer 3-12-6 (5149)	3.18	3.00	*11.52	12.00	6.19	6.00	-----
AA Climax Fertilizer 3-12-6 (5427)	3.01	3.00	11.88	12.00	6.24	6.00	-----
AA Farmers Friend Fertilizer 2-12-4 (5430)	2.04	2.00	12.02	12.00	4.22	4.00	-----
AA Farmers Friend Fertilizer 2-12-4 (6117)	2.07	2.00	12.62	12.00	4.46	4.00	-----
AA Gladiator Fertilizer 4-8-8 (5148)	4.04	4.00	8.14	8.00	8.43	8.00	-----
AA Gladiator Fertilizer 4-8-8 (5194)	4.09	4.00	8.61	8.00	8.25	8.00	-----
AA Gladiator Fertilizer 4-8-8 (5391)	3.97	4.00	8.45	8.00	*7.67	8.00	-----
AA Gladiator Fertilizer 4-8-8 (5423)	*3.79	4.00	8.19	8.00	8.00	8.00	-----
AA Gladiator Fertilizer 4-8-8 (5486)	4.02	4.00	8.42	8.00	8.36	8.00	-----
AA Gladiator Fertilizer 4-8-8 (5514)	3.87	4.00	7.88	8.00	8.02	8.00	-----
AA Gladiator Fertilizer 4-8-8 (5983)	4.18	4.00	8.34	8.00	8.14	8.00	-----
AA Hi-Test Fertilizer 8-16-16 (5426)	8.04	8.00	*15.70	16.00	16.12	16.00	-----
AA Horse Shoe Fertilizer 2-12-6 (5254)	2.01	2.00	12.05	12.00	6.44	6.00	-----
AA Horse Shoe Fertilizer 2-12-6 (5395)	2.01	2.00	12.06	12.00	6.55	6.00	-----
AA Horse Shoe Fertilizer 2-12-6 (5417)	2.09	2.00	12.04	12.00	5.90	6.00	-----
AA Horse Shoe Fertilizer 2-12-6 (5908)	2.24	2.00	12.12	12.00	6.53	6.00	-----
AA Horse Shoe Fertilizer 2-12-6 (5957)	2.14	2.00	12.32	12.00	6.62	6.00	-----
AA Horse Shoe Fertilizer 2-12-6 (6125)	2.16	2.00	12.84	12.00	6.21	6.00	-----
AA Old Hickory Fertilizer 2-8-10 (5429)	2.29	2.00	8.73	8.00	9.93	10.00	-----
AA Old Hickory Fertilizer 2-8-10 (5513)	2.01	2.00	8.05	8.00	*9.74	10.00	-----
AA Old Hickory Fertilizer 2-8-10 (5688)	2.04	2.00	8.13	8.00	10.26	10.00	-----
AA Old Hickory Fertilizer 2-8-10 (5787)	1.92	2.00	8.35	8.00	10.40	10.00	-----
AA Old Hickory Fertilizer 2-8-10 (5929)	2.12	2.00	8.63	8.00	10.02	10.00	-----
AA Old Hickory Fertilizer 2-8-10 (6116)	2.07	2.00	8.22	8.00	10.57	10.00	-----
AA Pathfinder Fertilizer 4-12-4 (5150)	4.19	4.00	12.02	12.00	4.46	4.00	-----
AA Pathfinder Fertilizer 4-12-4 (5201)	4.05	4.00	11.92	12.00	3.96	4.00	-----
AA Pathfinder Fertilizer 4-12-4 (5222)	4.14	4.00	11.89	12.00	4.48	4.00	-----
AA Pathfinder Fertilizer 4-12-4 (5982)	4.27	4.00	12.07	12.00	4.16	4.00	-----
AA Pathfinder Fertilizer 4-12-4 (6066)	4.09	4.00	12.87	12.00	4.29	4.00	-----
AA Pathfinder Fertilizer 4-12-4 (6129)	4.19	4.00	12.51	12.00	4.35	4.00	-----
AA Red Dog Fertilizer 2-9-5 (5410)	1.94	2.00	9.09	9.00	5.02	5.00	-----
AA Red Dog Fertilizer 2-9-5 (5685)	2.02	2.00	9.05	9.00	4.95	5.00	-----
AA Red Dog Fertilizer 2-9-5 (5745)	2.12	2.00	*9.41	9.00	5.19	5.00	-----
AA Red Seal Fertilizer 5-10-5 (5422)	4.89	5.00	*9.54	10.00	*5.16	5.00	-----
AA Red Seal Fertilizer 5-10-5 (6067)	4.86	5.00	11.75	10.00	4.39	5.00	-----
AA Two in One Fertilizer 4-16-4 (5125)	4.28	4.00	17.02	16.00	4.35	4.00	-----
AA Two in One Fertilizer 4-16-4 (5235)	4.21	4.00	16.08	16.00	3.95	4.00	-----
AA Two in One Fertilizer 4-16-4 (5370)	4.29	4.00	16.84	16.00	4.49	4.00	-----
AA Two in One Fertilizer 4-16-4 (5457)	4.28	4.00	16.96	16.00	4.28	4.00	-----
AA Two in One Fertilizer 4-16-4 (5481)	4.29	4.00	15.84	16.00	4.08	4.00	-----
AA Two in One Fertilizer 4-16-4 (6130)	4.66	4.00	16.92	16.00	4.60	4.00	-----
Agrico Country Club Fertilizer 6-8-2 (6059)							
Agrico for Corn 3-12-6 (5175)	3.02	3.00	8.26	8.00	2.87	2.00	-----
Agrico for Corn 3-12-6 (5234)	3.02	3.00	*11.13	12.00	5.98	6.00	-----
Agrico for Corn 3-12-6 (5397)	3.17	3.00	*11.67	12.00	5.88	6.00	-----
Agrico for Corn 3-12-6 (5413)	2.91	3.00	12.73	12.00	6.00	6.00	-----
Agrico for Corn 3-12-6 (5504)	3.02	3.00	*11.71	12.00	6.52	6.00	-----
Agrico for Corn 3-12-6 (5515)	3.15	3.00	*11.66	12.00	6.82	6.00	-----
Agrico for Corn 3-12-6 (5687)	3.16	3.00	12.32	12.00	6.10	6.00	-----
Agrico for Corn 3-12-6 (5793)	3.14	3.00	12.34	12.00	6.49	6.00	-----
Agrico for Corn 3-12-6 (6063)	3.29	3.00	12.11	12.00	6.32	6.00	-----
Agrico for Corn 3-12-6 (6063)	3.29	3.00	12.27	12.00	*5.60	6.00	-----
Agrico for Fruit 10-6-4 (6069)	10.23	10.00	6.39	6.00	4.35	4.00	-----
Agrico for Grain 2-12-4 (5178)	2.04	2.00	12.21	12.00	4.26	4.00	-----
Agrico for Grain 2-12-4 (5204)	2.11	2.00	11.88	12.00	4.19	4.00	-----
Agrico for Grain 2-12-4 (5251)	2.10	2.00	12.09	12.00	4.05	4.00	-----
Agrico for Grain 2-12-4 (5394)	2.19	2.00	12.64	12.00	4.32	4.00	-----
Agrico for Grain 2-12-4 (5411)	2.02	2.00	12.58	12.00	4.04	4.00	-----
Agrico for Grain 2-12-4 (5734)	2.29	2.00	12.19	12.00	4.32	4.00	-----
Agrico for Grain 2-12-4 (5786)	2.10	2.00	12.82	12.00	4.01	4.00	-----
Agrico for Grain 2-12-4 (5812)	2.22	2.00	12.70	12.00	4.84	4.00	-----
Agrico for Grain 2-12-4 (5906)	2.17	2.00	11.81	12.00	4.38	4.00	-----
Agrico for Grain 2-12-4 (5931)	2.24	2.00	12.38	12.00	4.30	4.00	-----
Agrico for Grain 2-12-4 (6131)	2.15	2.00	12.00	12.00	4.15	4.00	-----
Agrico for Grain 2-12-6 (5392)	2.13	2.00	12.75	12.00	6.34	6.00	-----
Agrico for Grain 2-12-6 (5419)	2.12	2.00	12.21	12.00	6.17	6.00	-----
Agrico for Grain 2-12-6 (5505)	2.14	2.00	12.44	12.00	6.17	6.00	-----
Agrico for Grain 2-12-6 (5965)	2.05	2.00	12.84	12.00	6.66	6.00	-----
Agrico for Grain 2-12-6 (6061)	2.12	2.00	12.04	12.00	6.10	6.00	-----
Agrico for Grain 2-12-6 (6132)	2.26	2.00	12.10	12.00	6.38	6.00	-----
Agrico for Grain 2-16-6 (5123)	2.29	2.00	17.32	16.00	6.94	6.00	-----
Agrico for Grain 2-16-6 (5377)	2.07	2.00	16.52	16.00	6.48	6.00	-----
Agrico for Grain 2-16-6 (5414)	2.18	2.00	16.58	16.00	6.21	6.00	-----
Agrico for Grain 2-16-6 (5484)	2.19	2.00	16.50	16.00	6.15	6.00	-----
Agrico for Potatoes 4-8-8 (5152)	4.24	4.00	8.32	8.00	7.86	8.00	-----
Agrico for Potatoes 4-8-8 (5176)	4.01	4.00	*7.40	8.00	8.14	8.00	-----
Agrico for Potatoes 4-8-8 (5223)	3.87	4.00	8.78	8.00	8.23	8.00	-----
Agrico for Potatoes 4-8-8 (5284)	4.01	4.00	8.04	8.00	8.41	8.00	-----
Agrico for Potatoes 4-8-8 (5393)	4.14	4.00	8.55	8.00	8.05	8.00	-----
Agrico for Potatoes 4-8-8 (5412)	*3.67	4.00	8.30	8.00	8.54	8.00	-----
Agrico for Potatoes 4-8-8 (5511)	4.05	4.00	8.18	8.00	8.55	8.00	-----
Agrico for Potatoes 4-8-8 (5682)	4.18	4.00	8.17	8.00	8.81	8.00	-----
*Deficient							

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
Agrico for Potatoes 4-8-8 (5790)	4.10	4.00	8.61	8.00	8.72	8.00	-----
Agrico for Potatoes 4-8-8 (5930)	4.24	4.00	8.46	8.00	8.02	8.00	-----
Agrico for Potatoes 4-8-8 (5942)	3.93	4.00	9.67	8.00	7.83	8.00	-----
Agrico for Potatoes 4-8-8 (6065)	3.87	4.00	8.06	8.00	8.19	8.00	-----
Agrico for Potatoes 4-8-10 (5416)	4.14	4.00	8.16	8.00	10.06	10.00	-----
Agrico for Potatoes 4-8-10 (6114)	4.14	4.00	8.23	8.00	10.78	10.00	-----
Agrico for Potatoes 5-15-15 (5371)	4.83	5.00	14.88	15.00	15.15	15.00	-----
Agrico for Tomatoes 4-14-6 (5228)	3.97	4.00	14.02	14.00	7.08	6.00	-----
Agrico for Tomatoes 4-14-6 (5399)	4.01	4.00	14.88	14.00	6.05	6.00	-----
Agrico for Tomatoes 4-14-6 (5421)	4.13	4.00	14.04	14.00	5.94	6.00	-----
Agrico for Tomatoes 4-14-6 (5792)	4.04	4.00	14.76	14.00	*6.67	6.00	-----
Agrico for Tomatoes 4-14-6 (5877)	4.14	4.00	14.86	14.00	6.45	6.00	-----
Agrico for Tomatoes 4-14-6 (6057)	4.49	4.00	14.86	14.00	6.74	6.00	-----
Agrico for Tomatoes 4-14-6 (6058)	4.12	4.00	14.18	14.00	6.57	6.00	-----
Agrico for Top Dressing 7-7-7 (5155)	7.16	7.00	7.08	7.00	7.14	7.00	-----
Agrico for Top Dressing 7-7-7 (5425)	*6.79	7.00	7.07	7.00	7.27	7.00	-----
Agrico for Top Dressing 7-7-7 (6060)	*6.29	7.00	8.46	7.00	6.85	7.00	-----
Agrico for Top Dressing 7-7-7 (6113)	7.10	7.00	7.43	7.00	7.96	7.00	-----
Agrico for Top Dressing 7-7-7 (6124)	*6.77	7.00	7.36	7.00	7.07	7.00	-----
Agrico for Truck 5-10-5 (5154)	5.09	5.00	10.07	10.00	5.09	5.00	-----
Agrico for Truck 5-10-5 (5196)	5.06	5.00	10.02	10.00	5.31	5.00	-----
Agrico for Truck 5-10-5 (5202)	5.05	5.00	10.12	10.00	4.90	5.00	-----
Agrico for Truck 5-10-5 (5225)	5.18	5.00	*9.55	10.00	5.33	5.00	-----
Agrico for Truck 5-10-5 (5415)	5.00	5.00	*9.50	10.00	5.22	5.00	-----
Agrico for Truck 5-10-5 (5483)	5.30	5.00	10.35	10.00	5.30	5.00	-----
Agrico for Truck 5-10-5 (5512)	5.29	5.00	10.30	10.00	5.08	5.00	-----
Agrico for Truck 5-10-5 (5672)	5.12	5.00	10.67	10.00	5.49	5.00	-----
Agrico for Truck 5-10-5 (5958)	5.29	5.00	11.06	10.00	5.37	5.00	-----
Agrico for Truck 5-10-5 (6064)	5.30	5.00	11.72	10.00	5.11	5.00	-----
Agrico for Truck 5-10-5 (6123)	5.14	5.00	10.07	10.00	5.31	5.00	-----
Agrico for Truck 5-10-10 (5418)	4.92	5.00	10.23	10.00	10.00	10.00	-----
Agrico for Wheat 2-12-6 (5124)	2.24	2.00	12.35	12.00	6.13	6.00	-----
Agrico for Wheat 2-12-6 (5177)	2.08	2.00	12.14	12.00	6.05	6.00	-----
Agrico for Wheat 2-12-6 (5735)	2.19	2.00	12.63	12.00	6.43	6.00	-----
Agrico for Wheat 2-12-6 (5788)	2.05	2.00	12.22	12.00	6.49	6.00	-----
Agrico for Wheat 2-12-6 (5811)	2.01	2.00	12.32	12.00	6.41	6.00	-----
Agrico for Wheat 2-12-6 (5907)	2.18	2.00	12.28	12.00	6.36	6.00	-----
Agrico for Wheat 2-12-6 (5945)	2.17	2.00	12.33	12.00	6.27	6.00	-----
Agrico for Wheat 2-12-6 (6019)	2.11	2.00	12.27	12.00	6.26	6.00	-----
Agrico for Wheat 2-12-6 (6133)	2.26	2.00	12.18	12.00	6.28	6.00	-----
Lister's Harvest Queen Fertilizer 2-9-5 (5686)	2.03	2.00	9.63	9.00	5.37	5.00	-----
Lister's Harvest Queen Fertilizer 2-9-5 (5789)	2.01	2.00	9.15	9.00	5.52	5.00	-----
ARMOUR FERTILIZER WORKS Baltimore, Md.							
Armour's Big Crop Fertilizer 2-8-10 (5188)	2.01	2.00	8.43	8.00	10.38	10.00	-----
Armour's Big Crop Fertilizer 2-8-10 (6092)	2.01	2.00	8.48	8.00	10.58	10.00	-----
Armour's Big Crop Fertilizer 2-9-5 (5126)	2.07	2.00	9.30	9.00	4.93	5.00	-----
Armour's Big Crop Fertilizer 2-9-5 (5708)	1.88	2.00	9.16	9.00	5.95	5.00	-----
Armour's Big Crop Fertilizer 2-9-5 (5747)	1.82	2.00	10.09	9.00	5.20	5.00	-----
Armour's Big Crop Fertilizer 2-9-5 (5775)	2.01	2.00	9.63	9.00	5.47	5.00	-----
Armour's Big Crop Fertilizer 2-9-5 (5967)	2.08	2.00	9.21	9.00	5.79	5.00	-----
Armour's Big Crop Fertilizer 2-12-4 (6096)	2.14	2.00	12.50	12.00	4.43	4.00	-----
Armour's Big Crop Fertilizer 2-12-6 (5129)	2.08	2.00	12.26	12.00	6.40	6.00	-----
Armour's Big Crop Fertilizer 2-12-6 (5247)	2.12	2.00	12.23	12.00	6.30	6.00	-----
Armour's Big Crop Fertilizer 2-12-6 (5374)	2.10	2.00	12.33	12.00	6.05	6.00	-----
Armour's Big Crop Fertilizer 2-12-6 (5467)	2.01	2.00	12.14	12.00	6.21	6.00	-----
Armour's Big Crop Fertilizer 2-12-6 (5477)	2.09	2.00	12.07	12.00	6.58	6.00	-----
Armour's Big Crop Fertilizer 2-12-6 (5713)	2.04	2.00	12.26	12.00	6.27	6.00	-----
Armour's Big Crop Fertilizer 2-12-6 (5719)	2.43	2.00	*11.77	12.00	6.38	6.00	-----
Armour's Big Crop Fertilizer 2-12-6 (5774)	2.02	2.00	12.47	12.00	6.20	6.00	-----
Armour's Big Crop Fertilizer 2-12-6 (5871)	2.10	2.00	12.84	12.00	6.28	6.00	-----
Armour's Big Crop Fertilizer 2-12-6 (5912)	2.05	2.00	12.97	12.00	*5.69	6.00	-----
Armour's Big Crop Fertilizer 2-12-6 (5949)	2.10	2.00	12.40	12.00	6.22	6.00	-----
Armour's Big Crop Fertilizer 2-12-6 (6022)	2.01	2.00	12.49	12.00	6.18	6.00	-----
Armour's Big Crop Fertilizer 3-12-6 (5185)	3.02	3.00	12.26	12.00	6.13	6.00	-----
Armour's Big Crop Fertilizer 3-12-6 (5242)	3.04	3.00	12.09	12.00	6.23	6.00	-----
Armour's Big Crop Fertilizer 3-12-6 (5373)	3.01	3.00	12.27	12.00	6.10	6.00	-----
Armour's Big Crop Fertilizer 3-12-6 (5469)	3.01	3.00	12.37	12.00	6.36	6.00	-----
Armour's Big Crop Fertilizer 3-12-6 (5711)	3.00	3.00	12.33	12.00	6.01	6.00	-----
Armour's Big Crop Fertilizer 3-12-6 (5776)	3.00	3.00	12.76	12.00	6.32	6.00	-----
Armour's Big Crop Fertilizer 3-12-6 (5870)	3.01	3.00	12.69	12.00	6.22	6.00	-----
Armour's Big Crop Fertilizer 3-12-6 (5909)	3.18	3.00	12.49	12.00	6.46	6.00	-----
*Deficient							

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
Armour's Big Crop Fertilizer 3-12-6 (5948)	3.03	3.00	13.13	12.00	6.01	6.00	-----
Armour's Big Crop Fertilizer 3-12-6 (6021)	3.06	3.00	12.74	12.00	6.27	6.00	-----
Armour's Big Crop Fertilizer 4-8-8 (5186)	3.93	4.00	8.34	8.00	8.26	8.00	-----
Armour's Big Crop Fertilizer 4-8-8 (5241)	3.95	4.00	8.44	8.00	7.84	8.00	-----
Armour's Big Crop Fertilizer 4-8-8 (5376)	4.06	4.00	8.79	8.00	7.96	8.00	-----
Armour's Big Crop Fertilizer 4-8-8 (5468)	3.88	4.00	8.12	8.00	8.21	8.00	-----
Armour's Big Crop Fertilizer 4-8-8 (5476)	3.91	4.00	8.66	8.00	7.88	8.00	-----
Armour's Big Crop Fertilizer 4-8-8 (5709)	4.01	4.00	8.07	8.00	8.25	8.00	-----
Armour's Big Crop Fertilizer 4-8-8 (5911)	4.04	4.00	9.16	8.00	8.48	8.00	-----
Armour's Big Crop Fertilizer 4-8-8 (6055)	3.82	4.00	9.14	8.00	*7.52	8.00	-----
Armour's Big Crop Fertilizer 4-8-8 (6094)	*3.67	4.00	9.41	8.00	7.87	8.00	-----
Armour's Big Crop Fertilizer 4-12-4 (5372)	3.88	4.00	12.37	12.00	4.09	4.00	-----
Armour's Big Crop Fertilizer 4-12-4 (5478)	4.11	4.00	12.67	12.00	4.33	4.00	-----
Armour's Big Crop Fertilizer 4-12-4 (5712)	4.23	4.00	12.03	12.00	4.34	4.00	-----
Armour's Big Crop Fertilizer 4-12-4 (5720)	3.88	4.00	12.18	12.00	4.00	4.00	-----
Armour's Big Crop Fertilizer 4-12-4 (5947)	4.00	4.00	12.40	12.00	4.67	4.00	-----
Armour's Big Crop Fertilizer 4-12-4 (6091)	4.06	4.00	12.63	12.00	4.26	4.00	-----
Armour's Big Crop Fertilizer 4-16-4 (5246)	4.04	4.00	16.60	16.00	4.58	4.00	-----
Armour's Big Crop Fertilizer 4-16-4 (6095)	4.08	4.00	16.84	16.00	4.63	4.00	-----
Armour's Big Crop Fertilizer 5-10-5 (5187)	*4.65	5.00	11.31	10.00	4.90	5.00	-----
BALTIMORE FERTILIZER COMPANY Baltimore, Md.							
Honest 2-8-10 (5384)	3.24	2.00	9.01	8.00	*9.34	10.00	-----
Honest 2-12-6 (5381)	2.20	2.00	12.60	12.00	6.33	6.00	-----
Honest 4-8-8 (5383)	4.07	4.00	9.18	8.00	8.77	8.00	-----
BAUGH & SONS CO., Philadelphia, Pa.							
Baugh's 2-12-4 (6110)	2.01	2.00	13.26	12.00	3.96	4.00	-----
Baugh's Advanced Grower's Special (5724)	5.07	5.00	8.38	8.00	7.67	7.00	-----
Baugh's Approved Truck Grower (5181)	4.01	4.00	8.15	8.00	8.34	8.00	-----
Baugh's Approved Truck Grower (5270)	4.05	4.00	8.19	8.00	8.15	8.00	-----
Baugh's Approved Truck Grower (5311)	4.04	4.00	8.56	8.00	8.03	8.00	-----
Baugh's Approved Truck Grower (5480)	4.12	4.00	8.08	8.00	8.21	8.00	-----
Baugh's Balanced Plant Food (5110)	4.15	4.00	12.77	12.00	4.15	4.00	-----
Baugh's Balanced Plant Food (5215)	4.21	4.00	12.62	12.00	4.32	4.00	-----
Baugh's Commercial Crop Compound (5111)	2.09	2.00	8.29	8.00	11.05	10.00	-----
Baugh's Commercial Crop Compound (5784)	2.17	2.00	8.49	8.00	10.64	10.00	-----
Baugh's Commercial Crop Compound (6112)	2.13	2.00	8.39	8.00	10.74	10.00	-----
Baugh's Complete Animal Base Fertilizer (5212)	2.01	2.00	9.13	9.00	5.37	5.00	-----
Baugh's Complete Animal Base Fertilizer (5312)	2.03	2.00	10.01	9.00	5.03	5.00	-----
Baugh's Complete Animal Base Fertilizer (5337)	2.23	2.00	9.53	9.00	5.00	5.00	-----
Baugh's Complete Animal Base Fertilizer (5669)	2.01	2.00	9.00	9.00	5.34	5.00	-----
Baugh's Complete Animal Base Fertilizer (5978)	2.22	2.00	9.78	9.00	5.09	5.00	-----
Baugh's Complete Animal Base Fertilizer (6101)	2.08	2.00	9.78	9.00	5.59	5.00	-----
Baugh's Corn & Oats Fertilizer (5668)	2.24	2.00	12.90	12.00	4.37	4.00	-----
Baugh's Corn & Oats Fertilizer (5783)	2.12	2.00	12.63	12.00	4.21	4.00	-----
Baugh's Corn & Oats Fertilizer (5972)	2.23	2.00	12.97	12.00	4.39	4.00	-----
Baugh's Double Eagle Phosphate (5182)	2.19	2.00	12.22	12.00	6.54	6.00	-----
Baugh's Double Eagle Phosphate (5213)	2.13	2.00	12.72	12.00	6.28	6.00	-----
Baugh's Double Eagle Phosphate (5278)	2.14	2.00	12.33	12.00	6.40	6.00	-----
Baugh's Double Eagle Phosphate (5336)	2.29	2.00	12.94	12.00	6.61	6.00	-----
Baugh's Double Eagle Phosphate (5482)	2.26	2.00	12.59	12.00	6.05	6.00	-----
Baugh's Double Eagle Phosphate (5785)	2.29	2.00	12.70	12.00	6.95	6.00	-----
Baugh's Double Eagle Phosphate (5971)	2.17	2.00	12.64	12.00	6.59	6.00	-----
Baugh's Double Eagle Phosphate (6106)	2.29	2.00	12.89	12.00	6.04	6.00	-----
Baugh's Double Power Fertilizer (5214)	4.22	4.00	16.78	16.00	4.19	4.00	-----
Baugh's Double Power Fertilizer (5273)	4.16	4.00	16.40	16.00	4.71	4.00	-----
Baugh's Double Power Fertilizer (6169)	4.12	4.00	17.60	16.00	4.31	4.00	-----
Baugh's Excelsior Mixture (5291)	1.29	1.00	11.59	10.00	4.92	5.00	-----
Baugh's Half Century Perfection Brand (6168)	4.09	4.00	8.45	8.00	7.00	7.00	-----
Baugh's High Grade Fish Brand (6104)	3.01	3.00	12.29	12.00	6.69	6.00	-----
Baugh's Premium Plant Food & Soil Builder 3-12-6 (5310)	3.08	3.00	12.44	12.00	6.30	6.00	-----
Baugh's Premium Plant Food & Soil Builder 3-12-6 (5782)	3.24	3.00	12.57	12.00	6.94	6.00	-----
Baugh's Premium Plant Food & Soil Builder 3-12-6 (6109)	3.14	3.00	12.23	12.00	6.46	6.00	-----
Baugh's Premium Plant Food & Soil Builder 5-10-5 (5183)	5.01	5.00	10.54	10.00	5.40	5.00	-----
Baugh's Three Quarter Century Perfection Brand (5180)	3.00	3.00	12.03	12.00	6.50	6.00	-----
Baugh's Three Quarter Century Perfection Brand (5306)	3.14	3.00	12.47	12.00	6.14	6.00	-----

*Deficient

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
Saugh's Three Quarter Century Perfection Brand (5479)	3.18	3.00	12.37	12.00	6.62	6.00	-----
Saugh's Three Quarter Century Perfection Brand (6167)	3.29	3.00	12.88	12.00	6.38	6.00	-----
Saugh's Tree Food (5279)	10.53	10.00	6.26	6.00	4.83	4.00	-----
Saugh's Truckers Favorite (5179)	5.08	5.00	9.86	10.00	5.31	5.00	-----
Saugh's Truckers Favorite (5211)	5.00	5.00	10.63	10.00	5.23	5.00	-----
Saugh's Truckers Favorite (6107)	5.27	5.00	10.33	10.00	5.31	5.00	-----
Saugh's Wheat Fertilizer for Wheat & Grass (5781)	3.23	3.00	12.97	12.00	6.88	6.00	-----
Saugh's Wheat Fertilizer for Wheat & Grass (5976)	2.89	3.00	12.96	12.00	6.59	6.00	-----
Saugh's Wheat Fertilizer for Wheat & Grass (6105)	3.26	3.00	12.39	12.00	6.48	6.00	-----
HERBERT BRYANT, INC. Alexandria, Virginia							
H.B.I. 2-8-10 (5331)	2.01	2.00	8.34	8.00	10.31	10.00	-----
H.B.I. 2-9-5 (5329)	2.15	2.00	9.00	9.00	*5.84	5.00	-----
H.B.I. 2-9-6 (5330)	2.29	2.00	12.29	12.00	*5.40	6.00	-----
H.B.I. 3-12-6 (5332)	3.24	3.00	12.06	12.00	6.17	6.00	-----
H.B.I. 4-8-7 (5328)	4.10	4.00	8.86	8.00	7.14	7.00	-----
CARLISLE FERTILIZER WORKS Carlisle, Pa.							
Carlisle 2-9-5 (5389)	2.53	2.00	10.22	9.00	5.24	5.00	-----
Carlisle 3-12-6 (5388)	3.29	3.00	12.17	12.00	7.22	6.00	-----
Carlisle 5-10-5 (5385)	5.15	5.00	11.38	10.00	5.30	5.00	-----
CENTRAL CHEMICAL CORP. OF MARYLAND Hagerstown, Md.							
Farmrite Fertilizer 2-12-6 (5257)	2.21	2.00	12.87	12.00	6.15	6.00	-----
Farmrite Fertilizer 2-12-6 (5896)	2.01	2.00	12.46	12.00	6.05	3.00	-----
Farmrite Fertilizer 2-12-6 (5915)	2.13	2.00	12.51	12.00	6.25	3.00	-----
Farmrite Fertilizer 2-12-6 (5950)	2.08	2.00	12.20	12.00	6.74	6.00	-----
Farmrite Crown Jewel (5861)	1.00	1.00	10.22	10.00	5.66	5.00	-----
Farmrite Excelsior (5256)	2.01	2.00	9.32	9.00	5.16	5.00	-----
Farmrite Excelsior (5317)	2.01	2.00	9.38	9.00	4.83	5.00	-----
Farmrite Excelsior (5456)	2.16	2.00	9.15	9.00	5.21	5.00	-----
Farmrite Excelsior (5731)	2.02	2.00	9.39	9.00	5.18	5.00	-----
Farmrite Excelsior (5893)	2.19	2.00	9.85	9.00	5.00	5.00	-----
Farmrite Excelsior (5926)	2.21	2.00	9.09	9.00	5.56	5.00	-----
Farmrite Excelsior (6050)	2.30	2.00	9.13	9.00	5.06	5.00	-----
Farmrite Excelsior (6120)	2.17	2.00	9.42	9.00	5.43	5.00	-----
Farmrite Excelsior (6142)	2.16	2.00	9.01	9.00	4.85	5.00	-----
Farmrite Famous Fruit Food (5453)	*7.69	10.00	6.48	6.00	4.07	4.00	-----
Farmrite Famous Old Fish Brand (5207)	2.09	2.00	12.03	12.00	6.67	6.00	-----
Farmrite Famous Old Fish Brand (5354)	2.01	2.00	*11.41	12.00	6.63	6.00	-----
Farmrite Famous Old Fish Brand (5750)	2.07	2.00	12.94	12.00	6.08	6.00	-----
Farmrite Famous Old Fish Brand (5894)	2.03	2.00	12.18	12.00	6.15	6.00	-----
Farmrite Famous Old Fish Brand (6048)	2.01	2.00	12.33	12.00	6.95	6.00	-----
Farmrite Farmers Favorite (5885)	4.22	4.00	12.23	12.00	4.47	4.00	-----
Farmrite Farmers Favorite (5952)	*4.19	4.00	*10.18	12.00	4.27	4.00	-----
Farmrite Farmers Friend (5200)	4.27	4.00	12.11	12.00	*3.74	4.00	-----
Farmrite Farmers Friend (5221)	4.04	4.00	12.65	12.00	4.20	4.00	-----
Farmrite Golden Grain (5198)	3.29	3.00	12.68	12.00	*5.44	6.00	-----
Farmrite Golden Grain (5315)	3.01	3.00	*11.70	12.00	6.89	6.00	-----
Farmrite Golden Grain (5356)	3.01	3.00	11.81	12.00	6.32	6.00	-----
Farmrite Golden Grain (5857)	3.06	3.00	12.73	12.00	6.22	6.00	-----
Farmrite Golden Grain (5889)	2.97	3.00	12.98	12.00	*5.72	6.00	-----
Farmrite Golden Grain (5913)	3.09	3.00	12.49	12.00	6.04	6.00	-----
Farmrite Grain Food (5245)	2.03	2.00	*11.48	12.00	4.95	4.00	-----
Farmrite Grain Food (5250)	2.04	2.00	*11.62	12.00	4.30	4.00	-----
Farmrite Grain Food (5455)	1.85	2.00	13.11	12.00	4.17	4.00	-----
Farmrite Grain Food (5730)	2.02	2.00	12.66	12.00	4.11	4.00	-----
Farmrite Grain Food (5890)	2.14	2.00	12.16	12.00	4.27	4.00	-----
Farmrite Grain Food (6047)	2.21	2.00	12.71	12.00	3.91	4.00	-----
Farmrite Imperial (5355)	2.19	2.00	*6.53	8.00	11.79	10.00	-----
Farmrite Imperial (5858)	2.01	2.00	8.04	8.00	*9.80	10.00	-----
Farmrite Imperial (5887)	2.13	2.00	8.15	8.00	10.18	10.00	-----
Farmrite Imperial (6049)	2.09	2.00	8.91	8.00	*8.36	10.00	-----
Farmrite Potato Grower (5249)	4.24	4.00	8.50	8.00	7.91	8.00	-----
Farmrite Potato Grower (5318)	4.28	4.00	8.30	8.00	8.53	8.00	-----
Farmrite Potato Grower (5859)	3.86	4.00	8.45	8.00	8.02	8.00	-----
Farmrite Potato Special (5243)	3.84	4.00	9.01	8.00	6.98	7.00	-----
Farmrite Potato Special (5316)	4.13	4.00	8.82	8.00	*6.77	7.00	-----
Farmrite Potato Special (5357)	3.95	4.00	8.46	8.00	6.83	7.00	-----
Farmrite Super Special (5860)	*3.84	4.00	16.02	16.00	4.64	4.00	-----
Farmrite Super Special (5886)	*3.76	4.00	16.16	16.00	4.54	4.00	-----
Farmrite Truck Special (5199)	5.02	5.00	10.12	10.00	5.17	5.00	-----
COOPERATIVE FERTILIZER SERVICE Baltimore, Md.							
C.F.S. 2-12-6 (5918)	2.07	2.00	12.40	12.00	6.48	6.00	-----
C.F.S. 2-12-6 (6013)	2.18	2.00	12.78	12.00	6.30	6.00	-----
C.F.S. 3-12-6 (6014)	3.03	3.00	12.98	12.00	6.01	6.00	-----
C.F.S. 3-12-6 (6135)	3.18	3.00	12.71	12.00	6.09	6.00	-----
C.F.S. 4-8-8 (6136)	4.03	4.00	8.06	8.00	8.38	8.00	-----
C.F.S. 4-12-4 (5917)	4.25	4.00	12.79	12.00	4.15	4.00	-----
C.F.S. 4-12-4 (6138)	*4.25	4.00	12.17	12.00	4.25	4.00	-----
C.F.S. 4-16-20 (6017)	*3.73	4.00	16.10	16.00	20.11	20.00	-----
C.F.S. 4-24-12 (6015)	4.09	4.00	24.22	24.00	13.57	12.00	-----
C.F.S. 4-24-12 (6137)	4.00	4.00	23.86	24.00	13.26	12.00	-----
COOPERATIVE G.L.F. SOIL BUILDING SERVICE, INC., New York, N. Y.							
G.L.F. 2-12-6 Non Acid (5340)	2.27	2.00	12.95	12.00	5.91	6.00	-----
G.L.F. 2-12-6 Non Acid (5442)	2.13	2.00	13.45	12.00	6.03	6.00	-----
G.L.F. 2-12-6 Non Acid (5503)	2.09	2.00	12.02	12.00	6.39	6.00	-----
G.L.F. 2-12-6 Non Acid (5770)	2.65	2.00	12.39	12.00	7.24	6.00	-----
G.L.F. 3-12-6 Non Acid (5339)	3.25	3.00	12.86	12.00	6.44	6.00	-----
G.L.F. 3-12-6 Non Acid (5493)	3.06	3.00	12.04	12.00	7.49	6.00	-----
G.L.F. 4-8-8 Acid (5769)	4.13	4.00	8.27	8.00	8.27	8.00	-----
*Deficient							

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
G.L.F. 4-8-8 Non Acid (5494)	3.86	4.00	8.27	8.00	8.48	8.00	-----
G.L.F. 4-8-12 (5443)	3.85	4.00	8.69	8.00	12.52	12.00	-----
G.L.F. 4-12-4 Non Acid (5444)	4.23	4.00	12.27	12.00	4.92	4.00	-----
G.L.F. 4-16-4 Non Acid (5338)	4.00	4.00	16.02	16.00	5.14	4.00	-----
G.L.F. 4-16-4 Non Acid (5432)	4.05	4.00	16.16	16.00	4.73	4.00	-----
G.L.F. 5-10-5 Non Acid (5342)	5.02	5.00	10.05	10.00	5.02	5.00	-----
G.L.F. 5-10-5 Non Acid (5445)	5.23	5.00	11.60	10.00	5.43	5.00	-----
G.L.F. 5-10-5 Non Acid (5491)	5.01	5.00	11.38	10.00	5.19	5.00	-----
G.L.F. 5-10-5 Non Acid (5491)	5.28	5.00	10.46	10.00	10.95	10.00	-----
G.L.F. 5-10-10 Acid (5447)	6.00	5.00	10.85	10.00	*9.32	10.00	-----
G.L.F. 5-10-10 Non Acid (5446)	5.01	5.00	9.86	10.00	10.49	10.00	-----
G.L.F. 5-10-10 Non Acid (5717)	5.01	5.00	20.52	20.00	5.51	5.00	-----
G.L.F. 5-20-5 (5448)	5.01	5.00	20.52	20.00	5.51	5.00	-----
CUMBERLAND VALLEY COOPERATIVE ASSOCIATION, Shippensburg, Pa.							
Old Reliable Sert Special 3-12-6 (5305)	3.69	3.00	13.14	12.00	6.85	6.00	-----
Old Reliable Sert Special 3-12-6 (5863)	2.89	3.00	*11.19	12.00	*4.64	6.00	-----
Old Reliable Potato Grower 4-8-8 (5262)	*2.94	4.00	12.43	8.00	*6.25	8.00	-----
Old Reliable Potato Grower 4-8-8 (5304)	*2.95	4.00	12.46	8.00	*6.49	8.00	-----
THE DAVISON CHEMICAL CORPORATION Baltimore, Md.							
Davco Granulated Fertilizer 2-8-10 (5090)	2.15	2.00	8.05	8.00	*8.93	10.00	-----
Davco Granulated Fertilizer 2-8-10 (5140)	2.21	2.00	8.34	8.00	10.18	10.00	-----
Davco Granulated Fertilizer 2-8-10 (5846)	2.02	2.00	8.42	8.00	10.15	10.00	-----
Davco Granulated Fertilizer 2-8-10 (5997)	2.28	2.00	8.35	8.00	*9.23	10.00	-----
Davco Granulated Fertilizer 2-9-6 (5093)	2.21	2.00	9.18	9.00	4.82	5.00	-----
Davco Granulated Fertilizer 2-9-5 (5142)	2.06	2.00	9.12	9.00	5.43	5.00	-----
Davco Granulated Fertilizer 2-9-5 (5676)	2.29	2.00	9.50	9.00	5.51	5.00	-----
Davco Granulated Fertilizer 2-9-5 (5841)	2.30	2.00	10.45	9.00	5.56	5.00	-----
Davco Granulated Fertilizer 2-9-5 (6002)	2.00	2.00	9.45	9.00	*4.07	5.00	-----
Davco Granulated Fertilizer 2-12-4 (5091)	2.04	2.00	12.33	12.00	4.19	4.00	-----
Davco Granulated Fertilizer 2-12-4 (5144)	2.07	2.00	12.45	12.00	3.88	4.00	-----
Davco Granulated Fertilizer 2-12-4 (5848)	2.27	2.00	13.49	12.00	4.21	4.00	-----
Davco Granulated Fertilizer 2-12-4 (6001)	2.01	2.00	11.90	12.00	4.17	4.00	-----
Davco Granulated Fertilizer 2-12-6 (5089)	2.13	2.00	12.38	12.00	6.56	6.00	-----
Davco Granulated Fertilizer 2-12-6 (5143)	2.04	2.00	11.93	12.00	6.79	6.00	-----
Davco Granulated Fertilizer 2-12-6 (5501)	2.01	2.00	*11.55	12.00	6.24	6.00	-----
Davco Granulated Fertilizer 2-12-6 (5680)	2.18	2.00	12.98	12.00	6.62	6.00	-----
Davco Granulated Fertilizer 2-12-6 (5836)	2.17	2.00	12.43	12.00	6.49	6.00	-----
Davco Granulated Fertilizer 2-12-6 (5899)	2.17	2.00	12.77	12.00	6.50	6.00	-----
Davco Granulated Fertilizer 2-12-6 (5934)	2.01	2.00	12.15	12.00	6.48	6.00	-----
Davco Granulated Fertilizer 2-12-6 (6003)	2.03	2.00	12.67	12.00	*5.68	6.00	-----
Davco Granulated Fertilizer 2-12-6 (6077)	2.07	2.00	12.05	12.00	5.95	6.00	-----
Davco Granulated Fertilizer 2-12-6 (6141)	2.29	2.00	12.41	12.00	6.05	6.00	-----
Davco Granulated Fertilizer 3-12-6 (5088)	3.04	3.00	12.09	12.00	6.81	6.00	-----
Davco Granulated Fertilizer 3-12-6 (5141)	3.19	3.00	12.02	12.00	6.32	6.00	-----
Davco Granulated Fertilizer 3-12-6 (5353)	3.08	3.00	12.03	12.00	6.61	6.00	-----
Davco Granulated Fertilizer 3-12-6 (5621)	3.10	3.00	12.37	12.00	*5.39	6.00	-----
Davco Granulated Fertilizer 3-12-6 (5677)	3.28	3.00	12.32	12.00	5.88	6.00	-----
Davco Granulated Fertilizer 3-12-6 (5845)	3.24	3.00	12.57	12.00	6.11	6.00	-----
Davco Granulated Fertilizer 3-12-6 (6000)	3.30	3.00	12.11	12.00	6.27	6.00	-----
Davco Granulated Fertilizer 3-12-6 (6045)	3.29	3.00	12.39	12.00	5.82	6.00	-----
Davco Granulated Fertilizer 4-8-8 (5085)	4.08	4.00	8.07	8.00	8.53	8.00	-----
Davco Granulated Fertilizer 4-8-8 (5139)	4.01	4.00	8.19	8.00	7.85	8.00	-----
Davco Granulated Fertilizer 4-8-8 (5352)	4.02	4.00	8.28	8.00	*7.59	8.00	-----
Davco Granulated Fertilizer 4-8-8 (5500)	3.90	4.00	8.19	8.00	8.28	8.00	-----
Davco Granulated Fertilizer 4-8-8 (5675)	4.10	4.00	8.27	8.00	8.14	8.00	-----
Davco Granulated Fertilizer 4-8-8 (5842)	4.23	4.00	8.21	8.00	7.95	8.00	-----
Davco Granulated Fertilizer 4-8-8 (5902)	4.19	4.00	8.25	8.00	8.01	8.00	-----
Davco Granulated Fertilizer 4-8-8 (5933)	4.19	4.00	8.31	8.00	8.04	8.00	-----
Davco Granulated Fertilizer 4-8-8 (5996)	4.19	4.00	8.06	8.00	8.10	8.00	-----
*Deficient							

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
Davco Granulated Fertilizer 4-12-4 (5086)	4.11	4.00	12.51	12.00	4.19	4.00	-----
Davco Granulated Fertilizer 4-12-4 (5147)	4.38	4.00	12.19	12.00	3.95	4.00	-----
Davco Granulated Fertilizer 4-12-4 (5935)	4.29	4.00	12.44	12.00	4.29	4.00	-----
Davco Granulated Fertilizer 4-12-4 (6075)	4.30	4.00	12.17	12.00	4.17	4.00	-----
Davco Granulated Fertilizer 4-16-4 (5092)	4.21	4.00	16.20	16.00	4.23	4.00	-----
Davco Granulated Fertilizer 4-16-4 (5847)	4.11	4.00	16.98	16.00	4.00	4.00	-----
Davco Granulated Fertilizer 4-16-4 (5903)	*3.69	4.00	16.92	16.00	4.23	4.00	-----
Davco Granulated Fertilizer 4-16-4 (5995)	4.04	4.00	16.42	16.00	4.05	4.00	-----
Davco Granulated Fertilizer 4-16-4 (6078)	4.27	4.00	16.28	16.00	4.24	4.00	-----
Davco Granulated Fertilizer 5-10-5 (5097)	5.29	5.00	10.21	10.00	4.97	5.00	-----
Davco Granulated Fertilizer 5-10-5 (5843)	5.27	5.00	10.75	10.00	5.14	5.00	-----
Davco Granulated Fertilizer 5-10-5 (6046)	*4.47	5.00	10.89	10.00	*4.40	5.00	-----
Davco Granulated Fertilizer 5-10-5 (6076)	5.29	5.00	10.36	10.00	5.16	5.00	-----
Davco Granulated Pomo Food 10-6-4 (5096)	9.93	10.00	6.60	6.00	4.15	4.00	-----
Davco Granulated Pomo Food 10-6-4 (5145)	11.31	10.00	*5.39	6.00	4.05	4.00	-----
Davco Granulated Pomo Food 10-6-4 (5679)	*9.58	10.00	6.41	6.00	4.28	4.00	-----
Davco Granulated Pomo Food 10-6-4 (5849)	10.29	10.00	6.14	6.00	4.12	4.00	-----
Davco Granulated Pomo Food 10-6-4 (5998)	10.10	10.00	6.31	6.00	3.98	4.00	-----
Old Reliable 2-8-10 (5102)	2.01	2.00	8.32	8.00	10.12	10.00	-----
Old Reliable 2-9-5 (5101)	2.04	2.00	9.11	9.00	5.29	5.00	-----
Old Reliable 3-12-6 (5099)	3.00	3.00	12.27	12.00	6.23	6.00	-----
Old Reliable 4-8-8 (5098)	3.93	4.00	8.88	8.00	8.23	8.00	-----
Old Reliable 4-12-4 (5100)	4.07	4.00	12.56	12.00	4.23	4.00	-----
EASTERN STATES FARMERS' EXCHANGE Springfield, Mass.							
Eastern States 4-16-8 (5451)	4.29	4.00	16.96	16.00	8.51	8.00	-----
Eastern States 4-16-8 (5822)	4.25	4.00	16.82	16.00	9.60	8.00	-----
Eastern States 4-16-8 (6030)	4.29	4.00	16.80	16.00	8.11	8.00	-----
Eastern States 4-16-20 (5162)	4.13	4.00	16.02	16.00	20.10	20.00	-----
Eastern States 4-16-20 (5298)	4.00	4.00	16.36	16.00	20.02	20.00	-----
Eastern States 4-16-20 (5993)	4.02	4.00	16.54	16.00	20.40	20.00	-----
Eastern States 4-16-20 (6031)	4.07	4.00	16.58	16.00	20.66	20.00	-----
Eastern States 4-24-12 (5132)	4.20	4.00	24.34	24.00	12.76	12.00	-----
Eastern States 4-24-12 (5164)	4.38	4.00	23.90	24.00	12.31	12.00	-----
Eastern States 4-24-12 (5292)	4.16	4.00	24.52	24.00	14.06	12.00	-----
Eastern States 4-24-12 (5449)	4.30	4.00	24.90	24.00	13.51	12.00	-----
Eastern States 4-24-12 (5762)	4.23	4.00	25.22	24.00	13.07	12.00	-----
Eastern States 4-24-12 (5815)	4.18	4.00	24.70	24.00	14.73	12.00	-----
Eastern States 4-24-12 (5966)	4.28	4.00	24.94	24.00	13.34	12.00	-----
Eastern States 5-10-10 (5159)	5.29	5.00	10.44	10.00	10.54	10.00	-----
Eastern States 5-10-10 (5452)	5.20	5.00	10.98	10.00	10.87	10.00	-----
Eastern States 5-10-10 (5821)	5.28	5.00	11.42	10.00	10.70	10.00	-----
Eastern States 5-10-15 (5824)	5.13	5.00	10.76	10.00	16.62	15.00	-----
Eastern States 5-10-15 (6032)	5.14	5.00	10.93	10.00	15.53	15.00	-----
Eastern States 5-15-5 (5136)	5.29	5.00	15.48	15.00	5.90	5.00	-----
Eastern States 5-15-5 (5160)	5.26	5.00	15.70	15.00	5.00	5.00	-----
Eastern States 5-15-5 (5450)	5.17	5.00	15.86	15.00	5.41	5.00	-----
Eastern States 5-15-5 (5517)	5.52	5.00	16.24	15.00	5.44	5.00	-----
Eastern States 5-15-5 (5994)	5.29	5.00	16.16	15.00	5.93	5.00	-----
Eastern States 8-16-16 (5134)	*7.35	8.00	17.30	16.00	*15.72	16.00	-----
Eastern States 8-16-16 (5163)	8.01	8.00	16.06	16.00	16.85	16.00	-----
Eastern States 8-16-16 (5294)	8.11	8.00	16.38	16.00	17.76	16.00	-----
Eastern States 8-16-16 (5825)	8.06	8.00	16.84	16.00	16.89	16.00	-----
Eastern States 8-24-8 (5133)	8.27	8.00	24.10	24.00	8.73	8.00	-----
Eastern States 8-24-8 (5295)	8.10	8.00	24.18	24.00	8.53	8.00	-----
Eastern States 8-24-8 (5818)	8.10	8.00	25.52	24.00	8.99	8.00	-----
Eastern States 8-24-8 (5991)	8.27	8.00	24.42	24.00	*7.78	8.00	-----
Eastern States 10-10-10 (5167)	9.88	10.00	10.83	10.00	10.59	10.00	-----
Eastern States 10-10-10 (5299)	*8.96	10.00	12.02	10.00	9.91	10.00	-----
FARMERS FERTILIZER WORKS Elizabethtown, Pa.							
Donegal Plant Food (5526)	5.15	5.00	10.34	8.00	6.49	6.00	-----
Farmers 1-10-5 (5540)	1.20	1.00	10.45	10.00	5.71	5.00	-----
Farmers 2-9-5 (5538)	2.01	2.00	9.15	9.00	5.84	5.00	-----
Farmers 2-12-6 (5530)	2.15	2.00	12.37	12.00	6.64	6.00	-----
Farmers 3-12-6 (5529)	3.25	3.00	12.36	12.00	6.10	6.00	-----
Farmers 4-8-8 (5539)	4.17	4.00	8.72	8.00	9.69	8.00	-----
Farmers 4-12-4 (5537)	4.22	4.00	12.68	12.00	4.55	4.00	-----
Farmers 4-16-4 (5541)	4.28	4.00	15.82	16.00	4.78	4.00	-----
Farmers Beet Yet (5533)	1.88	2.00	9.05	8.00	10.34	10.00	-----
Farmers Club (5536)	2.84	3.00	8.89	8.00	5.53	5.00	-----
Farmers General Tobacco (5527)	3.60	3.00	6.02	5.00	14.12	12.00	-----
Farmers Gilt Edge Potato & Truck (5532)	3.87	4.00	9.03	8.00	7.09	7.00	-----
Farmers IXL (5542)	2.07	2.00	12.13	12.00	4.16	4.00	-----
Farmers Tobacco Special (5528)	5.30	5.00	6.10	5.00	6.56	6.00	-----
GIPE FERTILIZER WORKS Lebanon, Pa.							
Gipe's 2-8-10 (5608)	*1.79	2.00	8.02	8.00	11.45	10.00	-----
Gipe's 2-9-5 (5610)	2.00	2.00	9.41	9.00	5.53	5.00	-----
Gipe's 2-12-6 (5609)	2.07	2.00	12.07	12.00	7.34	6.00	-----
Gipe's 3-12-6 (5607)	3.07	3.00	11.86	12.00	6.69	6.00	-----
Gipe's 4-8-8 (5606)	4.25	4.00	9.21	8.00	8.09	8.00	-----

*Deficient

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
GRIFFITH & BOYD COMPANY Baltimore, Md.							
Extra Strength Guano (5237)	4.20	4.00	16.15	16.00	4.42	4.00	-----
Extra Strength Guano (5986)	4.13	4.00	16.52	16.00	4.25	4.00	-----
Gilt Edge Crop Guano (5350)	2.00	2.00	8.19	8.00	11.30	10.00	-----
High Grade Fish & Potash Mixture (5349)	2.12	2.00	12.11	12.00	7.98	8.00	-----
High Grade Truck Guano (5192)	4.27	4.00	8.76	8.00	*6.66	7.00	-----
High Grade Truck Guano (5238)	4.01	4.00	8.78	8.00	*6.59	7.00	-----
High Grade Truck Guano (5324)	4.16	4.00	8.93	8.00	*6.49	7.00	-----
Peerless Fertilizer (5190)	1.27	1.00	10.00	10.00	4.89	5.00	-----
Peerless Fertilizer (5779)	1.27	1.00	10.22	10.00	5.09	5.00	-----
Planters Pride (5347)	3.01	3.00	12.29	12.00	6.86	6.00	-----
Planters Pride (5364)	3.20	3.00	12.73	12.00	6.12	6.00	-----
Planters Pride (5988)	3.30	3.00	12.61	12.00	6.50	6.00	-----
Reliable Crop Grower (5345)	2.21	2.00	12.08	12.00	4.54	4.00	-----
Reliable Crop Grower (5363)	2.20	2.00	12.45	12.00	4.42	4.00	-----
Reliable Crop Grower (5777)	2.28	2.00	12.54	12.00	4.33	4.00	-----
Reliable Crop Grower (5985)	2.13	2.00	12.68	12.00	4.03	4.00	-----
Royal Fish Guano (5351)	2.16	2.00	12.92	12.00	6.00	6.00	-----
Royal Guano (5343)	4.06	4.00	9.02	8.00	8.01	8.00	-----
Royal Guano (5359)	3.81	4.00	8.40	8.00	8.22	8.00	-----
Special Guano (5191)	2.21	2.00	9.35	9.00	5.76	5.00	-----
Special Guano (5365)	2.09	2.00	9.64	9.00	5.53	5.00	-----
Special Guano (5780)	2.08	2.00	10.83	9.00	5.16	5.00	-----
Special Guano (5984)	2.01	2.00	9.70	9.00	5.40	5.00	-----
Truck & Potato Special (5346)	5.28	5.00	10.14	10.00	*5.21	5.00	-----
Wheat & Grain Special (5344)	2.12	2.00	12.51	12.00	*5.60	6.00	-----
Wheat & Grain Special (5778)	2.29	2.00	12.55	12.00	6.04	6.00	-----
A. H. HOFFMAN, INC. Landisville, Pa.							
Plant Food (5772)	5.26	5.00	11.37	8.00	6.19	6.00	-----
INDEPENDENT MANUFACTURING CO. Philadelphia, Pa.							
Consumer 2-8-10 Fertilizer (5567)	2.16	2.00	8.52	8.00	10.39	10.00	-----
Consumer 2-8-10 Fertilizer (6158)	2.15	2.00	8.57	8.00	10.11	10.00	-----
Consumer 2-9-5 Fertilizer (5563)	2.25	2.00	9.08	9.00	5.49	5.00	-----
Consumer 2-9-5 Fertilizer (5968)	3.02	2.00	10.37	9.00	5.24	5.00	-----
Consumer 2-9-5 Fertilizer (6159)	2.30	2.00	9.63	9.00	5.04	5.00	-----
Consumer 2-12-6 Fertilizer (6165)	2.30	2.00	12.44	12.00	6.18	6.00	-----
Consumer 3-12-6 Fertilizer (6161)	3.28	3.00	12.48	12.00	6.79	6.00	-----
Consumer 4-16-4 Fertilizer (5561)	4.08	4.00	*14.72	16.00	4.57	4.00	-----
Consumer 4-16-4 Fertilizer (6160)	4.48	4.00	*15.78	16.00	4.30	4.00	-----
Consumer 5-8-7 Fertilizer (5562)	4.92	5.00	8.31	8.00	7.02	7.00	-----
Consumer 5-10-5 Fertilizer (6162)	5.27	5.00	10.84	10.00	5.87	5.00	-----
Consumer 5-10-10 Fertilizer (5566)	5.12	5.00	*9.80	10.00	9.97	10.00	-----
Standard 2-12-5 Special Wheat Fertilizer (6157)	2.28	2.00	12.99	12.00	5.58	5.00	-----
Standard 3-10-10 Fertilizer (5569)	3.29	3.00	10.88	10.00	11.21	10.00	-----
Standard 4-8-10 Fertilizer (5568)	4.03	4.00	7.92	8.00	10.39	10.00	-----
Standard 5-8-7 Fertilizer (5565)	5.02	5.00	8.62	8.00	7.00	7.00	-----
Standard 5-8-7 Fertilizer (6163)	5.14	5.00	9.65	8.00	*7.06	7.00	-----
Standard 5-10-10 Fertilizer (5570)	5.01	5.00	10.14	10.00	*9.61	10.00	-----
Standard 5-10-10 Fertilizer (6164)	5.16	5.00	10.70	10.00	10.00	10.00	-----
Standard 6-8-5 Fertilizer (5564)	*5.77	6.00	8.36	8.00	5.36	5.00	-----
Standard 6-8-5 Fertilizer (6166)	6.11	6.00	8.62	8.00	5.20	5.00	-----
LANCASTER BONE FERTILIZER CO., INC., Quarryville, Pa.							
Conestoga 2-8-10 (5548)	2.07	2.00	8.67	8.00	10.46	10.00	-----
Conestoga 3-12-6 (5302)	3.08	3.00	12.33	12.00	6.04	6.00	-----
Conestoga 3-12-6 (5546)	3.20	3.00	12.11	12.00	6.00	6.00	-----
Conestoga 4-16-4 (5550)	4.15	4.00	16.42	16.00	4.00	4.00	-----
Conestoga Grain Special (5545)	2.18	2.00	12.05	12.00	6.56	6.00	-----
Conestoga Grain Special (6097)	2.27	2.00	13.07	12.00	6.27	6.00	-----
Conestoga Harvest Queen (5301)	2.23	2.00	10.02	9.00	*4.79	5.00	-----
Conestoga Harvest Queen (5549)	2.10	2.00	9.36	9.00	5.01	5.00	-----
Conestoga Lancaster Peerless (5551)	2.03	2.00	12.05	12.00	4.31	4.00	-----
Conestoga Potato Special (5547)	4.20	4.00	10.17	10.00	8.38	8.00	-----
Conestoga Truckers Special (5300)	4.05	4.00	8.69	8.00	8.38	8.00	-----
Conestoga Truckers Special (5544)	4.12	4.00	8.65	8.00	8.52	8.00	-----
LEBANON FERTILIZER WORKS Lebanon, Pa.							
Levan's 1-10-5 (5599)	1.24	1.00	10.42	10.00	5.53	5.00	-----
Levan's 2-8-10 (5604)	2.00	2.00	8.27	8.00	10.03	10.00	-----
Levan's 2-9-5 (5603)	2.13	2.00	9.02	9.00	5.32	5.00	-----
Levan's 2-12-4 (5601)	2.01	2.00	12.16	12.00	4.79	4.00	-----
Levan's 2-12-6 (5595)	2.10	2.00	12.12	12.00	6.12	6.00	-----
Levan's 3-5-12 (5598)	3.05	3.00	5.26	5.00	12.76	12.00	-----
Levan's 3-12-6 (5594)	3.07	3.00	12.20	12.00	6.22	6.00	-----
Levan's 4-8-7 (5600)	4.10	4.00	8.12	8.00	7.42	7.00	-----
Levan's 4-8-8 (5602)	4.00	4.00	8.42	8.00	8.05	8.00	-----
Levan's 4-16-4 (5589)	4.22	4.00	16.20	16.00	4.14	4.00	-----
Levan's 4-16-10 (5590)	4.19	4.00	*15.52	16.00	10.18	10.00	-----
Levan's 5-8-7 (5597)	5.29	5.00	8.07	8.00	7.01	7.00	-----
Levan's 5-10-5 (5596)	5.28	5.00	10.38	10.00	5.13	5.00	-----
FRED E. LORD, INC., Espy, Pa.							
Lord's 2-8-10 (5804)	2.07	2.00	9.07	8.00	10.19	10.00	-----
Lord's 2-12-6 (5173)	2.19	2.00	12.64	12.00	6.17	6.00	-----
Lord's 4-8-8 (5174)	4.20	4.00	8.54	8.00	8.03	8.00	-----
Lord's 4-8-8 (5799)	4.25	4.00	8.62	8.00	8.35	8.00	-----
Lord's 5-10-5 (5171)	5.22	5.00	10.17	10.00	5.03	5.00	-----
Lord's 5-10-5 (5800)	5.01	5.00	10.12	10.00	5.13	5.00	-----
MILLER CHEMICAL & FERTILIZER CORP. Baltimore, Md.							
Rich Yield 2-8-10 (5616)	2.02	2.00	8.05	8.00	10.31	10.00	-----
Rich Yield 2-12-4 Farmers Profit (5617)	2.16	2.00	12.01	12.00	4.46	4.00	-----
Rich Yield 2-12-4 Farmers Profit (6100)	2.13	2.00	12.07	12.00	3.97	4.00	-----
*Deficient							

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
Rich Yield 2-12-6 (5615)	1.84	2.00	12.35	12.00	6.60	6.00	-----
Rich Yield 2-12-6 (5798)	2.12	2.00	12.67	12.00	6.62	6.00	-----
Rich Yield 2-12-6 (6084)	2.26	2.00	12.36	12.00	6.36	6.00	-----
Rich Yield 3-12-6 (5267)	*2.62	3.00	*11.55	12.00	6.06	6.00	-----
Rich Yield 3-12-6 (5796)	3.82	3.00	*11.64	12.00	*5.71	6.00	-----
Rich Yield 3-12-6 (6086)	3.26	3.00	12.25	12.00	6.58	6.00	-----
Rich Yield 4-8-8 Potato & Vegetable (5268)	3.91	4.00	8.51	8.00	7.81	8.00	-----
Rich Yield 4-8-8 Potato & Vegetable (5618)	*3.78	4.00	8.16	8.00	9.85	8.00	-----
Rich Yield 4-16-4 (5272)	4.29	4.00	*15.60	16.00	4.28	4.00	-----
Rich Yield Fish Brand Super Quality (5656)	2.13	2.00	12.07	12.00	6.89	6.00	-----
Rich Yield Fruit & Tree Food (5619)	10.01	10.00	7.69	6.00	4.25	4.00	-----
Rich Yield Harvest Queen (5661)	2.12	2.00	9.13	9.00	5.95	5.00	-----
Rich Yield Harvest Queen (6085)	2.03	2.00	9.17	9.00	5.00	5.00	-----
MYERSTOWN FERTILIZER WORKS							
Myerstown, Pa.							
Corn & Potato Grower 4-8-5 (5578)	*2.25	4.00	12.35	8.00	*3.62	5.00	-----
Corn & Potato Grower 4-8-7 (5579)	*2.61	4.00	9.37	8.00	7.08	7.00	-----
Farmers Special 3-10-3 (5580)	*2.57	3.00	10.20	10.00	4.27	3.00	-----
READING BONE FERTILIZER COMPANY							
Reading, Pa.							
Reading 2-8-10 (5524)	2.01	2.00	9.43	8.00	10.12	10.00	-----
Reading 2-9-5 (5333)	1.82	2.00	9.55	9.00	4.90	5.00	-----
Reading 2-9-5 (5516)	2.05	2.00	10.75	9.00	5.82	5.00	-----
Reading 2-9-5 (5839)	1.88	2.00	9.56	9.00	5.23	5.00	-----
Reading 2-9-5 (6043)	2.05	2.00	8.96	9.00	5.01	5.00	-----
Reading 3-12-6 (5519)	3.17	3.00	12.03	12.00	6.20	6.00	-----
Reading 3-12-6 (6044)	3.13	3.00	12.03	12.00	6.57	6.00	-----
Reading 4-8-8 (5309)	4.30	4.00	8.99	8.00	7.90	8.00	-----
Reading 4-8-8 (5335)	*3.55	4.00	10.76	8.00	*7.43	8.00	-----
Reading 4-8-8 (5520)	4.02	4.00	9.54	8.00	8.38	8.00	-----
Reading 4-16-4 (5518)	4.02	4.00	16.10	16.00	4.66	4.00	-----
Reading 4-16-4 (6042)	4.15	4.00	15.90	16.00	4.79	4.00	-----
Reading 5-10-5 (5517)	5.17	5.00	10.42	10.00	5.48	5.00	-----
Reading 5-10-5 (5690)	5.29	5.00	10.19	10.00	5.70	5.00	-----
Reading All Crop Special 2-12-6 (5308)	2.12	2.00	12.65	12.00	6.20	6.00	-----
Reading All Crop Special 2-12-6 (5334)	2.03	2.00	12.72	12.00	6.42	6.00	-----
Reading All Crop Special 2-12-6 (5523)	1.82	2.00	13.11	12.00	6.91	6.00	-----
Reading All Crop Special 2-12-6 (6041)	2.17	2.00	12.80	12.00	6.54	6.00	-----
Reading All Crop Special 2-12-6 (6089)	2.28	2.00	12.73	12.00	*5.08	6.00	-----
F. S. ROYSTER GUANO COMPANY							
Baltimore, Md.							
Royster Fertilizer 4-16-10 (5809)	4.01	4.00	16.32	16.00	9.83	10.00	-----
Royster Banner Guano (5195)	1.87	2.00	8.47	8.00	10.24	10.00	-----
Royster Banner Guano (5464)	2.00	2.00	8.36	8.00	10.10	10.00	-----
Royster Banner Guano (5702)	2.04	2.00	8.33	8.00	10.02	10.00	-----
Royster Big Bully Guano (5112)	2.03	2.00	9.46	9.00	5.12	5.00	-----
Royster Big Bully Guano (5367)	1.89	2.00	9.14	9.00	5.22	5.00	-----
Royster Big Bully Guano (5461)	2.02	2.00	9.16	9.00	5.10	5.00	-----
Royster Big Bully Guano (6027)	2.01	2.00	9.56	9.00	5.74	5.00	-----
Royster Curlew Guano (5463)	3.03	3.00	12.41	12.00	6.20	6.00	-----
Royster Curlew Guano (5923)	3.09	3.00	12.76	12.00	6.57	6.00	-----
Royster Dependable Truck Guano (5474)	5.28	5.00	10.06	10.00	5.00	5.00	-----
Royster Dependable Truck Guano (5706)	5.23	5.00	10.22	10.00	5.10	5.00	-----
Royster Gem Grain Guano (5465)	2.14	2.00	12.45	12.00	4.37	4.00	-----
Royster Gem Grain Guano (5700)	2.17	2.00	12.47	12.00	4.37	4.00	-----
Royster Gem Grain Guano (5807)	2.16	2.00	12.92	12.00	4.89	4.00	-----
Royster Hercules Guano (5462)	4.24	4.00	16.86	16.00	4.01	4.00	-----
Royster Hercules Guano (5705)	4.51	4.00	16.36	16.00	4.44	4.00	-----
Royster Hercules Guano (5924)	4.17	4.00	16.98	16.00	4.52	4.00	-----
Royster Hercules Guano (6143)	4.20	4.00	17.16	16.00	4.15	4.00	-----
Royster Master Grain Guano (5113)	2.05	2.00	12.11	12.00	6.20	6.00	-----
Royster Master Grain Guano (5227)	2.01	2.00	12.03	12.00	6.09	6.00	-----
Royster Master Grain Guano (5460)	2.05	2.00	12.73	12.00	6.03	6.00	-----
Royster Master Grain Guano (5473)	2.01	2.00	12.43	12.00	6.13	6.00	-----
Royster Master Grain Guano (5657)	2.05	2.00	12.06	12.00	6.44	6.00	-----
Royster Master Grain Guano (5699)	2.11	2.00	12.59	12.00	6.22	6.00	-----
Royster Master Grain Guano (5808)	2.01	2.00	12.81	12.00	6.59	6.00	-----
Royster Master Grain Guano (5808)	2.00	2.00	13.05	12.00	6.41	6.00	-----
Royster Master Grain Guano (5925)	2.01	2.00	12.79	12.00	6.51	6.00	-----
Royster Master Grain Guano (6028)	2.09	2.00	12.79	12.00	6.51	6.00	-----
Royster Trojan Guano (5366)	4.29	4.00	12.06	12.00	4.07	4.00	-----
Royster Trojan Guano (5704)	4.22	4.00	12.03	12.00	4.57	4.00	-----
Royster Trusty Guano (5369)	4.05	4.00	8.06	8.00	7.81	8.00	-----
Royster Trusty Guano (5471)	4.04	4.00	8.16	8.00	7.89	8.00	-----
Royster Trusty Guano (5698)	4.16	4.00	8.56	8.00	8.36	8.00	-----
Royster Trusty Guano (5805)	4.11	4.00	9.44	8.00	8.13	8.00	-----
CHARLES H. SEIBERT, Myerstown, Pa.							
Grade #1 2-10-5 (5587)	2.27	2.00	10.97	10.00	5.55	5.00	-----
Grade #2 2-8-10 (5586)	2.11	2.00	8.90	8.00	10.47	10.00	-----
Grade #3 2-12-6 (5585)	2.29	2.00	12.54	12.00	5.97	6.00	-----
Grade #4 4-8-8 (5584)	4.27	4.00	8.41	8.00	8.16	8.00	-----
Grade #5 4-16-10 (5581)	4.01	4.00	17.48	16.00	10.10	10.00	-----
Grade #6 5-10-10 (5583)	4.85	5.00	10.87	10.00	9.83	10.00	-----
Grade #7 4-16-4 (5582)	4.00	4.00	16.26	16.00	4.50	4.00	-----
Grade #8 3-12-6 (5588)	3.96	3.00	12.06	12.00	5.94	6.00	-----
M. L. SHOEMAKER & CO., INC.							
Philadelphia, Pa.							
Swift Sure 2-8-10 (5555)	2.08	2.00	9.22	8.00	10.22	10.00	-----
Swift Sure 2-9-5 (5575)	2.29	2.00	9.60	9.00	5.18	5.00	-----
Swift Sure 2-9-5 (6144)	2.30	2.00	9.96	9.00	6.11	5.00	-----
Swift Sure 2-12-6 (5977)	2.26	2.00	13.72	12.00	8.09	6.00	-----
Swift Sure 2-12-6 (6145)	1.85	2.00	13.35	12.00	8.24	6.00	-----
Swift Sure 3-12-6 (5576)	3.05	3.00	12.17	12.00	6.07	6.00	-----
Swift Sure 3-12-6 (6146)	3.13	3.00	12.49	12.00	5.93	6.00	-----

*Deficient

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
Swift Sure 4-8-7 (5S77)	3.90	4.00	8.19	8.00	7.57	7.00	-----
Swift Sure 4-12-4 (6147)	*3.78	4.00	13.35	12.00	4.42	4.00	-----
Swift Sure 5-8-7 (5SS4)	S.01	S.00	8.41	8.00	8.21	7.00	-----
THE SMITH AGRICULTURAL CHEMICAL COMPANY, Columbus, Ohio							
Sacco 2-8-10 (SS10)	2.04	2.00	8.68	8.00	10.06	10.00	-----
Sacco 2-12-6 (5954)	2.27	2.00	12.90	12.00	6.44	6.00	-----
Sacco 4-16-4 (SS09)	4.28	4.00	16.26	16.00	4.68	4.00	-----
SOMERSET COUNTY FERTILIZER WORKS, INC., Somerset, Pa.							
Beaver Brand 2-8-10 (6007)	2.03	2.00	8.73	8.00	*9.50	10.00	-----
Beaver Brand 2-9-8 (6009)	2.22	2.00	*8.75	9.00	S.60	5.00	-----
Beaver Brand 2-12-4 (6008)	2.21	2.00	12.38	12.00	4.68	4.00	-----
Beaver Brand 2-12-6 (6008)	2.00	2.00	12.28	12.00	6.16	6.00	-----
Beaver Brand 4-12-4 (6012)	4.04	4.00	12.91	12.00	4.47	4.00	-----
THE SUMMERS FERTILIZER CO., INC. Baltimore, Md.							
Summer's 4-8-12 (5611)	4.29	4.00	9.05	8.00	12.43	12.00	-----
Summer's S-10-8 (S612)	S.27	5.00	10.63	10.00	S.80	S.00	-----
SWACK FERTILIZER CO., DuBois, Pa.							
Swack's 2-8-10 (S121)	2.08	2.00	8.16	8.00	10.71	10.00	-----
Swack's 2-9-8 (S118)	2.02	2.00	9.41	9.00	S.00	5.00	-----
Swack's 2-9-5 (5832)	1.51	2.00	9.03	9.00	S.36	S.00	-----
Swack's 2-9-5 (S944)	2.00	2.00	9.36	9.00	S.68	5.00	-----
Swack's 2-12-4 (S104)	2.23	2.00	12.11	12.00	4.49	4.00	-----
Swack's 2-12-4 (S119)	2.23	2.00	12.70	12.00	4.07	4.00	-----
Swack's 2-12-4 (S830)	2.21	2.00	12.35	12.00	4.46	4.00	-----
Swack's 2-12-4 (S943)	2.29	2.00	12.36	12.00	4.41	4.00	-----
Swack's 2-12-4 (6024)	2.20	2.00	12.36	12.00	4.37	4.00	-----
Swack's 2-12-6 (S103)	2.13	2.00	12.03	12.00	6.46	6.00	-----
Swack's 2-12-6 (S116)	2.29	2.00	12.86	12.00	*5.84	6.00	-----
Swack's 2-12-6 (S829)	2.11	2.00	12.97	12.00	6.66	6.00	-----
Swack's 2-12-6 (S946)	2.18	2.00	12.63	12.00	6.54	6.00	-----
Swack's 2-12-6 (S953)	2.16	2.00	12.41	12.00	6.61	6.00	-----
Swack's 2-12-6 (6023)	2.19	2.00	12.33	12.00	6.34	6.00	-----
Swack's 3-12-6 (S106)	3.28	3.00	12.27	12.00	6.28	6.00	-----
Swack's 3-12-6 (S117)	3.19	3.00	12.18	12.00	6.03	6.00	-----
Swack's 3-12-6 (S829)	3.28	3.00	12.97	12.00	6.34	6.00	-----
Swack's 4-8-7 (S122)	4.27	4.00	8.73	8.00	*6.63	7.00	-----
Swack's 4-8-8 (S105)	4.27	4.00	8.12	8.00	8.52	8.00	-----
Swack's 4-8-8 (S120)	4.28	4.00	8.20	8.00	8.31	8.00	-----
Swack's 4-8-8 (S380)	4.24	4.00	8.00	8.00	*7.50	8.00	-----
Swack's 4-8-8 (S834)	3.91	4.00	8.89	8.00	8.10	8.00	-----
Swack's 4-12-4 (S115)	4.05	4.00	12.19	12.00	4.09	4.00	-----
Swack's 4-12-4 (S831)	4.20	4.00	13.11	12.00	4.67	4.00	-----
Swack's 4-16-4 (S833)	4.29	4.00	17.58	16.00	4.67	4.00	-----
Swack's 5-10-5 (S379)	S.30	5.00	10.26	10.00	S.05	5.00	-----
SWIFT & COMPANY FERTILIZER WORKS Baltimore, Md.							
Swift's Red Steer 2-8-10 (5404)	1.87	2.00	8.03	8.00	*9.34	10.00	-----
Swift's Red Steer 2-8-10 (5838)	2.00	2.00	8.93	8.00	9.81	10.00	-----
Swift's Red Steer 2-8-10 (5873)	2.01	2.00	8.87	8.00	10.78	10.00	-----
Swift's Red Steer 2-9-5 (5752)	1.82	2.00	9.61	9.00	S.59	5.00	-----
Swift's Red Steer 2-12-4 (S233)	2.01	2.00	12.22	12.00	4.03	4.00	-----
Swift's Red Steer 2-12-4 (S401)	2.19	2.00	12.20	12.00	4.23	4.00	-----
Swift's Red Steer 2-12-4 (S970)	2.16	2.00	12.35	12.00	4.32	4.00	-----
Swift's Red Steer 2-12-6 (S403)	2.11	2.00	12.57	12.00	6.25	6.00	-----
Swift's Red Steer 2-12-6 (S489)	2.01	2.00	12.42	12.00	6.37	6.00	-----
Swift's Red Steer 2-12-6 (S507)	2.01	2.00	12.31	12.00	6.22	6.00	-----
Swift's Red Steer 2-12-6 (S755)	*1.76	2.00	12.61	12.00	6.49	6.00	-----
Swift's Red Steer 2-12-6 (S872)	2.12	2.00	12.91	12.00	6.28	6.00	-----
Swift's Red Steer 2-12-6 (S921)	2.08	2.00	12.99	12.00	6.21	6.00	-----
Swift's Red Steer 2-12-6 (S937)	2.06	2.00	12.95	12.00	6.30	6.00	-----
Swift's Red Steer 2-12-6 (S975)	2.29	2.00	12.33	12.00	6.82	6.00	-----
Swift's Red Steer 3-12-6 (S403)	3.29	3.00	12.60	12.00	6.27	6.00	-----
Swift's Red Steer 3-12-6 (S866)	3.04	3.00	12.97	12.00	6.11	6.00	-----
Swift's Red Steer 3-12-6 (S874)	3.01	3.00	12.49	12.00	6.33	6.00	-----
Swift's Red Steer 3-12-6 (S938)	3.00	3.00	12.63	12.00	6.62	6.00	-----
Swift's Red Steer 4-8-8 (S407)	4.08	4.00	8.49	8.00	*7.67	8.00	-----
Swift's Red Steer 4-8-8 (S483)	4.09	4.00	8.10	8.00	8.13	8.00	-----
Swift's Red Steer 4-12-4 (S230)	3.95	4.00	12.49	12.00	4.04	4.00	-----
Swift's Red Steer 4-12-4 (S409)	4.19	4.00	12.71	12.00	4.33	4.00	-----
Swift's Red Steer 4-12-4 (S506)	4.00	4.00	12.42	12.00	4.16	4.00	-----
Swift's Red Steer 4-12-4 (S876)	4.27	4.00	13.21	12.00	4.20	4.00	-----
Swift's Red Steer 4-12-4 (S940)	4.01	4.00	12.72	12.00	4.48	4.00	-----
Swift's Red Steer 4-16-4 (S406)	4.12	4.00	16.78	16.00	4.16	4.00	-----
Swift's Red Steer 4-16-4 (S867)	*2.11	4.00	16.12	16.00	S.16	4.00	-----
Swift's Red Steer 5-10-5 (S508)	4.83	S.00	10.43	10.00	S.33	S.00	-----
Swift's Red Steer 5-13-8 (S402)	5.01	5.00	13.48	13.00	7.85	8.00	-----
Swift's Red Steer S-13-8 (S939)	S.11	5.00	13.76	13.00	8.17	8.00	-----
Swift's Red Steer 10-6-4 (S408)	10.23	10.00	6.47	6.00	4.15	4.00	-----
Vigoro (S771)	4.29	4.00	12.33	12.00	4.71	4.00	-----
TENNESSEE CORPORATION Lockland, Ohio							
Loma (S773)	S.14	S.00	10.66	10.00	4.00	4.00	-----
I. P. THOMAS & SON COMPANY Camden, N. J.							
Victor Potash Fertilizer (S6S9)	2.57	2.00	10.18	9.00	5.65	S.00	-----
TRENTON BONE FERTILIZER COMPANY Trenton, N. J.							
Special Mixture 2-9-5 (S955)	2.27	2.00	9.47	9.00	5.44	S.00	-----
Trenton 3-12-6 (S956)	3.21	3.00	12.26	12.00	6.02	6.00	-----
F. W. TUNNELL & COMPANY, INC. Philadelphia, Pa.							
Tunnell's 2-8-10 Fertilizer (SSS9)	2.19	2.00	8.47	8.00	10.54	10.00	-----
*Deficient							

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
Tunnell's 2-8-10 Fertilizer (5665)	2.29	2.00	3.65	8.00	10.63	10.00	-----
Tunnell's 2-8-10 Fertilizer (5959)	2.19	2.00	3.51	8.00	10.69	10.00	-----
Tunnell's 2-8-10 Fertilizer (6150)	2.25	2.00	8.93	8.00	⁹ 9.76	10.00	-----
Tunnell's 2-9-5 Fertilizer (5560)	2.28	2.00	9.79	9.00	5.21	5.00	-----
Tunnell's 2-9-5 Fertilizer (5663)	2.26	2.00	9.38	9.00	5.45	5.00	-----
Tunnell's 2-9-5 Fertilizer (5960)	2.30	2.00	9.96	9.00	5.17	5.00	-----
Tunnell's 2-9-5 Fertilizer (6149)	2.23	2.00	9.93	9.00	4.83	5.00	-----
Tunnell's 2-10-6 Fish Brand (6153)	2.30	2.00	10.37	10.00	6.83	6.00	-----
Tunnell's 2-12-6 Fertilizer (5558)	2.27	2.00	12.51	12.00	6.90	6.00	-----
Tunnell's 2-12-6 Fertilizer (5764)	2.28	2.00	12.73	12.00	6.71	6.00	-----
Tunnell's 2-12-6 Fertilizer (5961)	2.19	2.00	12.60	12.00	5.85	6.00	-----
Tunnell's 2-12-6 Fertilizer (6152)	2.29	2.00	12.35	12.00	6.21	6.00	-----
Tunnell's 3-12-6 Fertilizer (5557)	3.29	3.00	12.91	12.00	6.16	6.00	-----
Tunnell's 3-12-6 Fertilizer (5765)	2.86	3.00	12.44	12.00	6.09	6.00	-----
Tunnell's 3-12-6 Fertilizer (6155)	3.12	3.00	12.52	12.00	6.05	6.00	-----
Tunnell's 4-8-8 Fertilizer (5571)	4.29	4.00	8.29	8.00	⁷ 7.90	8.00	-----
Tunnell's 4-8-8 Fertilizer (5767)	4.08	4.00	8.67	8.00	8.55	8.00	-----
Tunnell's 4-8-8 Fertilizer (6151)	4.12	4.00	8.87	8.00	8.19	8.00	-----
Tunnell's 4-8-10 Fertilizer (5574)	4.22	4.00	8.04	8.00	10.03	10.00	-----
Tunnell's 4-8-10 Fertilizer (5674)	4.12	4.00	8.47	8.00	11.01	10.00	-----
Tunnell's 4-12-4 Fertilizer (5184)	4.05	4.00	12.20	12.00	4.07	4.00	-----
Tunnell's 4-12-4 Fertilizer (6148)	4.15	4.00	13.07	12.00	4.51	4.00	-----
VIRGINIA-CAROLINA CHEMICAL CORP. Baltimore, Md.							
V-C 2-8-10 Fertilizer (5671)	1.94	2.00	8.05	8.00	10.73	10.00	-----
V-C 2-8-10 Fertilizer (5854)	2.02	2.00	8.99	8.00	10.90	10.00	-----
V-C 2-9-5 Fertilizer (5157)	2.09	2.00	9.26	9.00	5.16	5.00	-----
V-C 2-9-5 Fertilizer (5662)	2.06	2.00	9.69	9.00	5.43	5.00	-----
V-C 2-9-5 Fertilizer (5974)	2.14	2.00	9.34	9.00	5.57	5.00	-----
V-C 2-12-4 Fertilizer (5218)	2.87	2.00	12.33	12.00	4.33	4.00	-----
V-C 2-12-4 Fertilizer (5693)	2.12	2.00	12.13	12.00	4.52	4.00	-----
V-C 2-12-4 Fertilizer (5878)	2.10	2.00	12.85	12.00	4.07	4.00	-----
V-C 2-12-4 Fertilizer (6040)	2.22	2.00	12.82	12.00	4.13	4.00	-----
V-C 2-12-6 Fertilizer (5495)	2.16	2.00	12.30	12.00	6.32	6.00	-----
V-C 2-12-6 Fertilizer (5670)	2.12	2.00	12.36	12.00	6.34	6.00	-----
V-C 2-12-6 Fertilizer (5827)	2.05	2.00	13.41	12.00	5.55	6.00	-----
V-C 2-12-6 Fertilizer (5853)	2.01	2.00	12.80	12.00	6.25	6.00	-----
V-C 2-12-6 Fertilizer (5881)	1.94	2.00	12.29	12.00	6.21	6.00	-----
V-C 2-12-6 Fertilizer (5963)	2.10	2.00	12.88	12.00	6.25	6.00	-----
V-C 2-12-6 Fertilizer (5980)	2.10	2.00	12.93	12.00	6.13	6.00	-----
V-C 2-12-6 Fertilizer (6036)	2.01	2.00	12.50	12.00	6.02	6.00	-----
V-C 2-12-6 Fertilizer (6036)	2.89	3.00	12.02	12.00	5.95	6.00	-----
V-C 3-12-6 Fertilizer (5156)	2.86	3.00	12.47	12.00	6.03	6.00	-----
V-C 3-12-6 Fertilizer (5883)	3.04	3.00	12.71	12.00	6.52	6.00	-----
V-C 3-12-6 Fertilizer (5962)	3.26	3.00	12.59	12.00	6.10	6.00	-----
V-C 3-12-6 Fertilizer (6036)	3.97	4.00	8.82	8.00	8.56	8.00	-----
V-C 4-8-8 Fertilizer (5673)	4.01	4.00	8.30	8.00	8.55	8.00	-----
V-C 4-8-8 Fertilizer (6039)	4.14	4.00	12.91	12.00	4.09	4.00	-----
V-C 4-12-4 Fertilizer (5826)	4.01	4.00	12.52	12.00	4.24	4.00	-----
V-C 4-12-4 Fertilizer (5882)	4.04	4.00	16.94	16.00	4.24	4.00	-----
V-C 4-16-4 Fertilizer (5852)	4.10	4.00	17.28	16.00	4.25	4.00	-----
V-C 4-16-4 Fertilizer (5979)	4.07	4.00	17.12	16.00	4.00	4.00	-----
V-C 4-16-4 Fertilizer (6034)	5.13	5.00	10.08	10.00	4.90	5.00	-----
V-C 5-10-5 Fertilizer (5168)	5.08	5.00	10.20	10.00	5.00	5.00	-----
V-C 5-10-5 Fertilizer (5695)	2.04	2.00	9.54	9.00	5.20	5.00	-----
V-C Fish & Potash Mixture 2-9-5 (5219)	2.01	2.00	9.04	9.00	5.24	5.00	-----
V-C Fish & Potash Mixture 2-9-5 (5487)	2.19	2.00	9.32	9.00	5.45	5.00	-----
V-C Fish & Potash Mixture 2-9-5 (5694)	2.07	2.00	10.10	9.00	5.01	5.00	-----
V-C Fish & Potash Mixture 2-9-5 (5855)	2.09	2.00	9.98	9.00	5.31	5.00	-----
V-C Fish & Potash Mixture 2-9-5 (6033)							-----
WESTERN PENNSYLVANIA NURSERYMAN'S ASSOCIATION, Pittsburgh, Pa.							
Growell Fertilizer (6074)	4.26	4.00	12.30	12.00	4.01	4.00	-----
YORK CHEMICAL WORKS, York, Pa.							
Dempwolf's 2-8-10 (5434)	2.30	2.00	8.38	8.00	10.25	10.00	-----
Dempwolf's 2-8-10 (5632)	2.22	2.00	8.92	8.00	10.57	10.00	-----
Dempwolf's 2-12-4 (5436)	2.29	2.00	12.51	12.00	4.29	4.00	-----
Dempwolf's 2-12-4 (5634)	2.28	2.00	12.08	12.00	4.58	4.00	-----
Dempwolf's 2-12-6 (5437)	2.21	2.00	12.40	12.00	6.33	6.00	-----
Dempwolf's 2-12-6 (5633)	2.29	2.00	12.02	12.00	7.37	6.00	-----
Dempwolf's 2-12-6 (5794)	2.15	2.00	12.13	12.00	7.24	6.00	-----
Dempwolf's 3-8-12 for Tobacco (5625)	3.01	3.00	9.14	8.00	12.31	12.00	-----
Dempwolf's 4-8-7 (5439)	4.16	4.00	9.38	8.00	⁶ 6.80	7.00	-----
Dempwolf's 4-8-7 (5636)	4.21	4.00	8.98	8.00	7.88	7.00	-----
Dempwolf's 4-8-8 (5622)	4.08	4.00	8.56	8.00	8.83	8.00	-----
Dempwolf's 4-8-12 for Tobacco (5641)	4.10	4.00	8.24	8.00	12.63	12.00	-----
Dempwolf's 4-12-4 (5623)	4.53	4.00	12.60	12.00	4.79	4.00	-----
Dempwolf's 4-12-12 (5637)	4.30	4.00	¹¹ 11.44	12.00	13.62	12.00	-----
Dempwolf's 4-16-4 (5624)	4.25	4.00	17.04	16.00	4.72	4.00	-----
Dempwolf's 5-10-5 (5431)	5.30	5.00	10.70	10.00	5.04	5.00	-----
Dempwolf's 5-10-5 (5639)	5.29	5.00	10.43	10.00	5.57	5.00	-----
Dempwolf's General Crop (5438)	3.30	3.00	12.89	12.00	6.45	6.00	-----
Dempwolf's General Crop (5629)	3.01	3.00	12.57	12.00	6.76	6.00	-----
Dempwolf's General Crop (5797)	3.26	3.00	12.56	12.00	6.45	6.00	-----
Dempwolf's High Test (5432)	8.51	8.00	17.64	16.00	14.68	14.00	-----
Dempwolf's High Test (5626)	8.24	8.00	16.54	16.00	14.76	14.00	-----
Dempwolf's Potato & Truck (5643)	5.28	5.00	8.16	8.00	7.41	7.00	-----
Dempwolf's Standard (5435)	2.16	2.00	9.25	9.00	5.34	5.00	-----
Dempwolf's Standard (5631)	2.13	2.00	9.14	9.00	5.61	5.00	-----
Dempwolf's Tobacco Special (5638)	5.21	5.00	8.06	8.00	7.89	7.00	-----
Dempwolf's Top Dresser (5441)	6.01	6.00	6.88	6.00	5.46	5.00	-----
Dempwolf's Top Dresser (5535)	6.04	6.00	6.80	6.00	5.54	5.00	-----
YORK STONE & SUPPLY CO., York, Pa.							
Cramer's York 2-8-10 (5654)	2.30	2.00	8.79	8.00	11.78	10.00	-----
Cramer's York 2-9-5 (5650)	2.78	2.00	10.08	9.00	6.03	5.00	-----
Cramer's York 2-12-4 (5648)	2.84	2.00	12.07	12.00	7.17	4.00	-----
Cramer's York 2-12-6 (5649)	2.90	2.00	12.62	12.00	7.43	6.00	-----
Cramer's York 3-12-6 (5645)	3.81	3.00	12.03	12.00	7.25	6.00	-----
Cramer's York 4-8-7 (5651)	4.65	4.00	8.54	8.00	8.43	7.00	-----
Cramer's York 4-8-8 (5644)	4.52	4.00	9.07	8.00	8.20	8.00	-----

*Deficient

TABLE III. ANALYSES OF COMPLETE FERTILIZERS—FURNISHING NITROGEN, PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
Cramer's York 4-8-12 (5653)	4.20	4.00	9.10	8.00	14.32	12.00	-----
Cramer's York 4-12-4 (5646)	4.75	4.00	12.45	12.00	5.21	4.00	-----
Cramer's York 5-10-5 (5655)	5.29	5.00	10.26	10.00	6.34	5.00	-----
Average	3.38	-----	11.50	-----	6.73	-----	-----

TABLE IV. GROUND BONE FERTILIZERS—FURNISHING NITROGEN AND PHOSPHORIC ACID

MANUFACTURER AND BRAND NAME	NITROGEN		PHOSPHORIC ACID	
	Found	Guar.	Found	Guar.
	P. ct.	P. ct.	P. ct.	P. ct.
THE AMERICAN AGRICULTURAL CHEMICAL CO. New York, N. Y.				
Fine Ground Bone (6071)	2.74	2.47	25.90	23.00
Pure Raw Bone (6070)	4.46	3.70	23.30	20.00
ARMOUR FERTILIZER WORKS, Baltimore, Md. Armour's Raw Bone Meal (5721)	3.94	3.70	22.50	20.50
ASSOCIATED CHEMICAL COMPANY, Hagerstown, Md.				
Fine Bone Meal (5326)	3.01	2.47	25.20	22.00
Fine Bone Meal (5892)	2.80	2.47	26.10	22.00
Pure Raw Bone (5325)	4.21	3.70	22.80	20.00
Pure Raw Bone (5891)	4.01	3.70	22.70	20.00
BAUGH & SONS CO., Philadelphia, Pa.				
Baugh's Pure Steamed Bone Meal (5209)	2.71	2.47	25.40	23.00
Baugh's Raw Bone Meal (5208)	4.20	3.70	22.60	20.50
Baugh's Raw Bone Meal (5276)	3.76	3.70	20.60	20.50
Baugh's Raw Bone Meal (5722)	4.15	3.70	21.60	20.50
Baugh's Raw Bone Meal (6108)	4.00	3.70	21.30	20.50
CONSOLIDATED-BY PRODUCT CO., Philadelphia, Pa. Consolidated Bone Meal (5768)	1.15	0.80	33.70	32.00
THE DAVISON CHEMICAL CORPORATION, Baltimore, Md. Raw Bone Meal (6081)	4.10	3.70	22.60	20.00
EASTERN STATES FARMERS' EXCHANGE, Springfield, Mass. Eastern States Ground Steamed Bone (5B23)	3.20	2.30	26.20	23.00
FARMERS FERTILIZER WORKS, Elizabethtown, Pa. Farmers Bone Meal (5543)	4.09	3.70	22.60	20.00
GRIFFITH & BOYD COMPANY, Baltimore, Md. Pure Fine Ground Bone Meal (5240)	4.16	3.70	22.80	20.00
MILLER CHEMICAL & FERTILIZER CORP., Baltimore, Md. Raw Bone Meal (60B7)	4.03	3.70	22.30	20.50
F. W. TUNNELL & CO., INC., Philadelphia, Pa. Raw Ground Bone (5556)	4.00	3.70	21.50	21.50
Average	3.62	---	23.77	----

TABLE V. SUPERPHOSPHATE AND LIME PHOSPHATE FERTILIZERS—FURNISHING PHOSPHORIC ACID

MANUFACTURER AND BRAND NAME	PHOSPHORIC ACID					
	Total		Available		Insoluble	
	Found	Guar.	Found	Guar.	Found	Guar.
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
<u>SUPERPHOSPHATE FERTILIZERS</u>						
THE ACME GUANO CO., Baltimore, Md.						
Acme 20% Superphosphate (5282)			21.58	20.00		
Acme 20% Superphosphate (5739)			21.14	20.00		
THE AMERICAN AGRICULTURAL CHEMICAL CO. New York, N. Y.						
AA 16% Superphosphate (5203)			16.72	16.00		
AA 16% Superphosphate (5683)			17.08	16.00		
AA 16% Superphosphate (5742)			17.30	16.00		
AA 20% Superphosphate (5153)			21.16	20.00		
AA 20% Superphosphate (5205)			21.56	20.00		
AA 20% Superphosphate (5224)			20.24	20.00		
AA 20% Superphosphate (5398)			21.76	20.00		
AA 20% Superphosphate (56B4)			21.12	20.00		
AA 20% Superphosphate (5813)			21.90	20.00		
AA 20% Superphosphate (5905)			21.86	20.00		
AA 20% Superphosphate (592B)			21.70	20.00		
AA 20% Superphosphate (6020)			21.64	20.00		
AA 20% Superphosphate (6062)			21.96	20.00		
AA 20% Superphosphate (6099)			20.72	20.00		
AA 20% Superphosphate (6121)			20.76	20.00		
AA 20% Superphosphate (6127)			20.82	20.00		
ARMOUR FERTILIZER WORKS, Baltimore, Md.						
Armour's Big Crop Superphosphate 16% (5127)			17.30	16.00		
Armour's Big Crop Superphosphate 16% (5707)			16.76	16.00		
Armour's Big Crop Superphosphate 16% (5733)			16.46	16.00		
Armour's Big Crop Superphosphate 16% (5969)			16.72	16.00		
Armour's Big Crop Superphosphate 20% (5107)			20.78	20.00		
Armour's Big Crop Superphosphate 20% (5128)			20.94	20.00		
Armour's Big Crop Superphosphate 20% (5236)			20.68	20.00		
Armour's Big Crop Superphosphate 20% (5375)			21.18	20.00		
Armour's Big Crop Superphosphate 20% (5470)			20.84	20.00		
Armour's Big Crop Superphosphate 20% (5475)			20.84	20.00		
Armour's Big Crop Superphosphate 20% (5714)			20.86	20.00		
Armour's Big Crop Superphosphate 20% (5718)			20.74	20.00		
Armour's Big Crop Superphosphate 20% (5748)			21.06	20.00		
Armour's Big Crop Superphosphate 20% (5910)			21.78	20.00		
Armour's Big Crop Superphosphate 20% (5927)			21.78	20.00		
Armour's Big Crop Superphosphate 20% (6023)			21.02	20.00		
Armour's Big Crop Superphosphate 20% (6056)			20.86	20.00		
BALTIMORE FERTILIZER CO., Baltimore, Md.						
Honest 16% Superphosphate (586B)			17.64	16.00		
Honest 20% Superphosphate (5869)			21.50	20.00		
BAUGH & SONS CO., Philadelphia, Pa.						
Baughphos The Ideal 16% Superphosphate (5275)			18.22	16.00		
Baughphos The Ideal 16% Superphosphate (5723)			20.69	16.00		
Baughphos The Ideal 16% Superphosphate (5736)			17.04	16.00		
Baughphos The Ideal 20% Superphosphate (5271)			20.66	20.00		
Baughphos The Ideal 20% Superphosphate (5737)			21.78	20.00		
CARLISLE FERTILIZER WORKS, Carlisle, Pa.						
Carlisle 16% Superphosphate (53B6)			16.90	16.00		
Carlisle 20% Superphosphate (53B7)			21.22	20.00		
CENTRAL CHEMICAL CORPORATION OF MARYLAND Hagerstown, Md.						
Farmrite Superphosphate 16% (5220)			17.96	16.00		
Farmrite Superphosphate 16% (5255)			16.90	16.00		
Farmrite Superphosphate 16% (5319)			17.26	16.00		
Farmrite Superphosphate 16% (5729)			16.80	16.00		
Farmrite Superphosphate 16% (5895)			18.78	16.00		
Farmrite Superphosphate 16% (6054)			17.62	16.00		
Farmrite Superphosphate 20% (5197)			21.34	20.00		
Farmrite Superphosphate 20% (5259)			20.48	20.00		
Farmrite Superphosphate 20% (5728)			20.98	20.00		
Farmrite Superphosphate 20% (588B)			20.10	20.00		
Farmrite Superphosphate 20% (5900)			21.56	20.00		
Farmrite Superphosphate 20% (5914)			20.92	20.00		
Farmrite Superphosphate 20% (5951)			20.08	20.00		
Farmrite Superphosphate 20% (6053)			20.88	20.00		
Farmrite Superphosphate 20% (6073)			21.56	20.00		
Farmrite Superphosphate 20% - Granulated (5248)			20.32	20.00		
COOPERATIVE FERTILIZER SERVICE Baltimore, Md.						
C.F.S. 16% Superphosphate (6018)			16.48	16.00		
C.F.S. 20% Superphosphate (5916)			21.22	20.00		
C.F.S. 20% Superphosphate (6134)			21.06	20.00		
COOPERATIVE G.L.F. SOIL BUILDING SERVICE, INC., New York, N. Y.						
G.L.F. Superphosphate 20% (5502)			21.46	20.00		
G.L.F. Superphosphate 20% (Granular) (5490)			21.38	20.00		
G.L.F. Superphosphate 20% (Granular) (5497)			20.80	20.00		

TABLE V. SUPERPHOSPHATE AND LIME PHOSPHATE FERTILIZERS—FURNISHING PHOSPHORIC ACID

200-4-40

10-10

MANUFACTURER AND BRAND NAME	PHOSPHORIC ACID					
	Total		Available		Insoluble	
	Found P. ct.	Guar. P. ct.	Found P. ct.	Guar. P. ct.	Found P. ct.	Guar. P. ct.
CUMBERLAND VALLEY COOPERATIVE ASSOCIATION Shippensburg, Pa.						
Old Reliable 20% Superphosphate (5264)			20.90	20.00		
Old Reliable 20% Superphosphate (5864)			21.12	20.00		
Old Reliable 20% Superphosphate - Granulated (5865)			21.52	20.00		
THE DAVISON CHEMICAL CORPORATION Baltimore, Md.						
20% Superphosphate (5485)			21.66	20.00		
20% Superphosphate (5498)			20.68	20.00		
Davco Granulated 20% Superphosphate (5087)			21.56	20.00		
Davco Granulated 20% Superphosphate (5146)			20.48	20.00		
Davco Granulated 20% Superphosphate (5232)			21.60	20.00		
Davco Granulated 20% Superphosphate (5499)			21.34	20.00		
Davco Granulated 20% Superphosphate (5681)			21.12	20.00		
Davco Granulated 20% Superphosphate (5835)			22.02	20.00		
Davco Granulated 20% Superphosphate (5898)			21.54	20.00		
Davco Granulated 20% Superphosphate (5932)			21.38	20.00		
Davco Granulated 20% Superphosphate (6004)			21.44	20.00		
Davco Granulated 20% Superphosphate (6079)			21.32	20.00		
Davco Granulated 20% Superphosphate (6140)			21.34	20.00		
EASTERN STATES FARMERS' EXCHANGE Springfield, Mass.						
Eastern States 20% Superphosphate (5161)			20.74	20.00		
Eastern States 20% Superphosphate (5759)			20.78	20.00		
Eastern States 20% Superphosphate (5992)			21.12	20.00		
Eastern States 20% Superphosphate - Granular (5131)			21.80	20.00		
Eastern States 20% Superphosphate - Granular (5296)			20.90	20.00		
Eastern States 20% Superphosphate - Granular (5819)			21.40	20.00		
Eastern States 40% Superphosphate (5820)			41.06	40.00		
FARMERS FERTILIZER WORKS Elizabethtown, Pa.						
Farmers Acid Phosphate 16% (5535)			16.08	16.00		
Farmers Acid Phosphate 20% (5534)			20.08	20.00		
GRIFFITH & BOYD CO., Baltimore, Md.						
16% Superphosphate (5323)			16.30	16.00		
Special 20% Superphosphate (5239)			21.10	20.00		
Special 20% Superphosphate (5314)			20.94	20.00		
Special 20% Superphosphate (5358)			21.48	20.00		
Special 20% Superphosphate (5361)			20.54	20.00		
Special 20% Superphosphate (5989)			21.24	20.00		
LANCASTER BONE FERTILIZER CO., INC. Quarryville, Pa.						
Conestoga Superphosphate 18% (5303)			18.52	18.00		
Conestoga Superphosphate 18% (5553)			18.58	18.00		
Conestoga Superphosphate 18% (6098)			18.30	18.00		
LEBANON FERTILIZER WORKS, Lebanon, Pa.						
Levan's Superphosphate 16% (5605)			17.26	16.00		
Levan's Superphosphate 20% (5592)			21.56	20.00		
FRED E. LORD, INC., Espy, Pa.						
Lord's 20% Superphosphate (5802)			21.62	20.00		
MILLER CHEMICAL & FERTILIZER CORPORATION Baltimore, Md.						
Rich Yield Superphosphate 16% (5620)			17.14	16.00		
Rich Yield Superphosphate 16% (6082)			17.66	16.00		
Rich Yield Superphosphate 20% (6265)			20.88	20.00		
Rich Yield Superphosphate 20% (6083)			21.08	20.00		
READING BONE FERTILIZER CO., Reading, Pa.						
Reading 16% Superphosphate (5525)			17.12	16.00		
Reading 16% Superphosphate (5691)			16.26	16.00		
Reading 16% Superphosphate (6090)			16.04	16.00		
Reading 20% Superphosphate (5522)			21.32	20.00		
Reading 20% Superphosphate (5692)			20.96	20.00		
F. S. ROYSTER GUANO CO., Baltimore, Md.						
Royster Superphosphate 16% (5193)			16.66	16.00		
Royster Superphosphate 16% (5244)			16.20	16.00		
Royster Superphosphate 16% (5701)			16.04	16.00		
Royster Superphosphate 20% (5114)			20.92	20.00		
Royster Superphosphate 20% (5226)			21.38	20.00		
Royster Superphosphate 20% (5368)			21.18	20.00		
Royster Superphosphate 20% (5466)			20.00	20.00		
Royster Superphosphate 20% (5472)			20.90	20.00		
Royster Superphosphate 20% (5703)			21.46	20.00		
Royster Superphosphate 20% (5922)			20.70	20.00		

TABLE V. SUPERPHOSPHATE AND LIME PHOSPHATE FERTILIZERS—FURNISHING PHOSPHORIC ACID

MANUFACTURER AND BRAND NAME	PHOSPHORIC ACID					
	Total		Available		Insoluble	
	Found P. ct.	Guar. P. ct.	Found P. ct.	Guar. P. ct.	Found P. ct.	Guar. P. ct.
THE SMITH AGRICULTURAL CHEMICAL COMPANY Columbus, Ohio Secco 20% Superphosphate (6118)			21.36	20.00		
SOMERSET COUNTY FERTILIZER WORKS, INC. Somerset, Pa. Beaver Brand 20% Superphosphate (6006)			20.56	20.00		
STANDARD WHOLESALE PHOSPHATE & ACID WORKS, INC., Baltimore, Md. Standard 16% Superphosphate (5260) Standard 20% Superphosphate (5261) Standard 20% Superphosphate (5746)			17.96 20.68 21.04	16.00 20.00 20.00		
THE SUMMERS FERTILIZER CO., INC. Baltimore, Md. Summers 20% Superphosphate (5613)			21.26	20.00		
SWACK FERTILIZER CO., DuBois, Pa. Swack's Superphosphate 20% (5378) Swack's Superphosphate 20% (5941) Swack's Superphosphate 20% (6026)			20.74 20.92 21.46	20.00 20.00 20.00		
SWIFT & COMPANY FERTILIZER WORKS Baltimore, Md. Swift's Red Steer Superphosphate 20% (5231) Swift's Red Steer Superphosphate 20% (5400) Swift's Red Steer Superphosphate 20% (5754) Swift's Red Steer Superphosphate 20% (5875) Swift's Red Steer Superphosphate 20% (5920) Swift's Red Steer Superphosphate 20% (5936)			21.62 21.34 21.92 21.66 21.72 21.28	20.00 20.00 20.00 20.00 20.00 20.00		
F. W. TUNNELL & CO., INC. Philadelphia, Pa. Tunnell's 16% Superphosphate (5572) Tunnell's 20% Superphosphate (5573) Tunnell's 20% Superphosphate (5664) Tunnell's 20% Superphosphate (5766) Tunnell's 20% Superphosphate (6156)			16.76 20.92 20.22 21.28 21.60	16.00 20.00 20.00 20.00 20.00		
VIRGINIA-CAROLINA CHEMICAL CORPORATION Baltimore, Md. V-C 16% Superphosphate (5170) V-C 16% Superphosphate (5217) V-C 16% Superphosphate (5667) V-C 16% Superphosphate (5850) V-C 16% Superphosphate (5880) V-C 16% Superphosphate (5973) V-C 20% Superphosphate (5158) V-C 20% Superphosphate (5216) V-C 20% Superphosphate (5459) V-C 20% Superphosphate (5496) V-C 20% Superphosphate (5856) V-C 20% Superphosphate (5879) V-C 20% Superphosphate (5964) V-C 20% Superphosphate (5981)			16.08 16.02 16.22 16.76 17.30 17.14 20.72 21.66 21.40 20.98 20.86 21.16 21.36 21.42	16.00 16.00 16.00 16.00 16.00 16.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00		
YORK CHEMICAL WORKS, York, Pa. Dempwolf's Superphosphate 20% (5440) Dempwolf's Superphosphate 20% (5640)			21.44 20.86	20.00 20.00		
YORK STONE & SUPPLY CO., York, Pa. Cramer's York 20% Superphosphate (5652)			20.68	20.00		
Average			20.24	----		

TABLE V. SUPERPHOSPHATE AND LIME PHOSPHATE FERTILIZERS—FURNISHING PHOSPHORIC ACID

200-4-40

MANUFACTURER AND BRAND NAME	PHOSPHORIC ACID					
	Total		Available		Insoluble	
	Found P. ct.	Guar. P. ct.	Found P. ct.	Guar. P. ct.	Found P. ct.	Guar. P. ct.
<u>LIME PHOSPHATE FERTILIZERS</u>						
THE ACME GUANO CO., Baltimore, Md. Acme 16% Lime Phosphate (5283)			17.06	16.00		
THE AMERICAN AGRICULTURAL CHEMICAL CO. New York, N. Y. AA Basic Lime Phosphate 16% (5743)			16.34	16.00		
ARMOUR FERTILIZER WORKS, Baltimore, Md. Armour's Big Crop Lime Phosphate 16% (5710)			16.06	16.00		
BAUGH & SONS CO., Philadelphia, Pa. Baugh's Lime & Phosphate (5313) Baugh's Lime & Phosphate (5738)			16.76 17.22	16.00 16.00		
CENTRAL CHEMICAL CORPORATION OF MARYLAND Hagerstown, Md. Carbo Lime Phosphate 16% (5320) Carbo Lime Phosphate 16% (5732)			16.36 16.02	16.00 16.00		
LEBANON FERTILIZER WORKS, Lebanon, Pa. Levan's Lime Phosphate (5593)			16.76	16.00		
F. S. ROYSTER GUANO CO., Baltimore, Md. Royster Lime Phosphate 16% (5806)			17.32	16.00		
SWIFT & COMPANY FERTILIZER WORKS Baltimore, Md. Swift's Red Steer Lime Phosphate 16% (5756)			18.62	16.00		
VIRGINIA-CAROLINA CHEMICAL CORPORATION Baltimore, Md. V-C Phosphate & Lime Mixture (6035)			16.68	16.00		
YORK CHEMICAL WORKS, York, Pa. Dempwolf's Lime Phosphate 16% (5630)			16.40	16.00		
Average			16.80	-----		

TABLE VI. ROCK AND POTASH FERTILIZERS—FURNISHING PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	As Muriate
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
THE ACME GUANO CO., Baltimore, Md.					
Acme O-14-6 (5287)	14.34	14.00	8.53	6.00	-----
Acme O-14-6 (5741)	15.40	14.00	*4.41	6.00	-----
THE AMERICAN AGRICULTURAL CHEMICAL CO. New York, N. Y.					
AA Chieftain Mixture O-14-6 (6103)	14.76	14.00	6.29	6.00	-----
AA Victory Mixture O-12-5 (5689)	12.37	12.00	5.33	5.00	-----
AA Victory Mixture O-12-5 (5744)	12.37	12.00	5.25	5.00	-----
AA XXX Mixture O-12-12 (5390)	12.44	12.00	12.99	12.00	-----
AA XXX Mixture O-12-12 (5420)	11.93	12.00	12.79	12.00	-----
AA XXX Mixture O-12-12 (6115)	12.76	12.00	13.36	12.00	-----
AA XXX Mixture O-12-12 (6128)	12.45	12.00	12.80	12.00	-----
ARMOUR FERTILIZER WORKS, Baltimore, Md.					
Armour's 81g Crop Fertilizer O-12-12 (6093)	12.48	12.00	12.86	12.00	-----
Armour's 81g Crop Fertilizer O-14-6 (5189)	14.46	14.00	6.40	6.00	-----
Armour's 81g Crop Fertilizer O-14-6 (5715)	14.14	14.00	*5.77	6.00	-----
Armour's 81g Crop Fertilizer O-14-6 (5749)	14.34	14.00	6.28	6.00	-----
Armour's 81g Crop Fertilizer O-14-6 (6119)	14.56	14.00	5.93	6.00	-----
BALTIMORE FERTILIZER CO., Baltimore, Md.					
Honest O-14-6 (5382)	15.68	14.00	6.09	6.00	-----
BAUGH & SONS CO., Philadelphia, Pa.					
Baugh's Phosphate & Potash Mixture O-12-5 (6111)	13.26	12.00	*4.59	5.00	-----
Baugh's Phosphate & Potash Mixture O-14-6 (5277)	15.22	14.00	5.91	6.00	-----
Baugh's Phosphate & Potash Mixture O-14-6 (6102)	15.08	14.00	6.63	6.00	-----
CENTRAL CHEMICAL CORPORATION OF MARYLAND Hagerstown, Md.					
Farmrite Fertilizer O-14-6 (5897)	14.78	14.00	6.15	6.00	-----
Farmrite Fertilizer O-14-6 (6051)	14.08	14.00	7.10	6.00	-----
Farmrite Potash Special O-12-5 (5258)	12.69	12.00	5.51	5.00	-----
Farmrite Potash Special O-12-5 (5321)	12.92	12.00	5.05	5.00	-----
Farmrite Potash Special O-12-5 (5751)	*11.21	12.00	5.07	5.00	-----
Farmrite Potash Special O-12-5 (6052)	12.07	12.00	6.31	5.00	-----
COOPERATIVE FERTILIZER SERVICE Baltimore, Md.					
C.F.S. O-14-6 (6016)	14.86	14.00	6.57	6.00	-----
C.F.S. O-14-6 (6139)	14.70	14.00	6.83	6.00	-----
COOPERATIVE G.L.F. SOIL BUILDING SERVICE, INC., New York, N. Y.					
G.L.F. O-20-10 (5341)	20.14	20.00	*8.69	10.00	-----
CUMBERLAND VALLEY COOPERATIVE ASS'N. Shippensburg, Pa.					
Old Reliable Valley Special O-14-6 (5263)	14.08	14.00	6.96	6.00	-----
Old Reliable Valley Special O-14-6 (5862)	15.50	14.00	5.82	6.00	-----
THE DAVISON CHEMICAL CORPORATION Baltimore, Md.					
Davco Granulated Fertilizer O-12-5 (5678)	13.33	12.00	4.93	5.00	-----
Davco Granulated Fertilizer O-12-5 (5999)	12.74	12.00	4.85	5.00	-----
Davco Granulated Fertilizer O-12-12 (5094)	12.42	12.00	12.10	12.00	-----
Davco Granulated Fertilizer O-14-6 (5095)	14.90	14.00	6.77	6.00	-----
Davco Granulated Fertilizer O-14-6 (5253)	15.08	14.00	6.03	6.00	-----
Davco Granulated Fertilizer O-14-6 (5844)	15.46	14.00	6.03	6.00	-----
Davco Granulated Fertilizer O-14-6 (5901)	14.68	14.00	6.42	6.00	-----
EASTERN STATES FARMERS' EXCHANGE Springfield, Mass.					
Eastern States O-20-20 (5135)	20.58	20.00	20.94	20.00	-----
Eastern States O-20-20 (5165)	20.08	20.00	20.56	20.00	-----
Eastern States O-20-20 (5293)	20.54	20.00	20.24	20.00	-----
Eastern States O-20-20 (5761)	20.12	20.00	21.32	20.00	-----
Eastern States O-20-20 (5816)	20.86	20.00	21.58	20.00	-----
Eastern States O-24-12 (5130)	24.88	24.00	13.25	12.00	-----
Eastern States O-24-12 (5166)	24.38	24.00	13.14	12.00	-----
Eastern States O-24-12 (5297)	24.18	24.00	12.64	12.00	-----
Eastern States O-24-12 (5760)	24.72	24.00	12.85	12.00	-----
Eastern States O-24-12 (5814)	24.50	24.00	14.13	12.00	-----
Eastern States O-24-12 (5990)	24.10	24.00	13.21	12.00	-----
Eastern States O-24-12 (6029)	24.48	24.00	12.85	12.00	-----
FARMERS FERTILIZER WORKS Elizabethtown, Pa.					
Farmers Phosphate & Potash O-12-5 (5531)	12.15	12.00	5.51	5.00	-----
GRIFFITH & SOYD CO., Baltimore, Md.					
Phosphate & Potash O-14-6 (5348)	14.26	14.00	*5.80	6.00	-----
Phosphate & Potash O-14-6 (5360)	14.62	14.00	*5.71	6.00	-----
Phosphate & Potash O-14-6 (5987)	15.02	14.00	6.16	6.00	-----
Special Grain Grower O-12-5 (5322)	*11.54	12.00	5.08	5.00	-----
Special Grain Grower O-12-5 (5758)	12.17	12.00	5.06	5.00	-----
LANCASTER BONE FERTILIZER CO., INC. Quarryville, Pa.					
Conestoga O-14-6 (5552)	14.92	14.00	*5.24	6.00	-----
LEBANON FERTILIZER WORKS, Lebanon, Pa.					
Levan's O-12-5 (5591)	12.05	12.00	5.04	5.00	-----
FRED E. LORD, INC., Espy, Pa.					
Lord's O-10-10 (5172)	10.27	10.00	*9.66	10.00	-----
Lord's O-10-10 (5803)	10.70	10.00	10.03	10.00	-----
Lord's O-14-6 (5801)	14.80	14.00	6.90	6.00	-----
*Deficient					

TABLE VI. ROCK AND POTASH FERTILIZERS—FURNISHING PHOSPHORIC ACID AND POTASH

MANUFACTURER AND BRAND NAME	AVAILABLE PHOSPHORIC ACID		POTASH		
	Found	Guar.	Found	Guar.	As Muriate
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
MILLER CHEMICAL & FERTILIZER CORP. Baltimore, Md.					
Rich Yield 0-10-10 (5269)	11.76	10.00	11.71	10.00	-----
Rich Yield 0-12-5 (5266)	13.15	12.00	5.86	5.00	-----
Rich Yield 0-14-6 (5614)	14.10	14.00	6.72	6.00	-----
READING BONE FERTILIZER CO., Reading, Pe. Reading Phosphate & Potash 0-14-6 (5521)	15.08	14.00	6.05	6.00	-----
F. S. ROYSTER GUANO CO., Baltimore, Md. Royster Phosphate & Potash 0-10-10 (5810)	11.42	10.00	10.18	10.00	-----
SOMERSET COUNTY FERTILIZER WORKS, INC. Somerset, Pe. Beaver Brand 0-12-5 (6010)	12.32	12.00	5.61	5.00	-----
SWIFT & COMPANY FERTILIZER WORKS Baltimore, Md.					
Swift's Red Steer 0-12-5 (5753)	12.31	12.00	5.00	5.00	-----
Swift's Red Steer 0-12-12 (5229)	12.60	12.00	12.65	12.00	-----
Swift's Red Steer 0-12-12 (5837)	12.72	12.00	12.02	12.00	-----
Swift's Red Steer 0-12-12 (5904)	12.08	12.00	12.86	12.00	-----
Swift's Red Steer 0-14-6 (5757)	14.20	14.00	7.12	6.00	-----
F. W. TUNNELL & COMPANY, INC. Philadelphia, Pa. Tunnell's 0-14-7 Fertilizer (6154)	14.24	14.00	*6.72	7.00	-----
VIRGINIA-CAROLINA CHEMICAL CORPORATION Baltimore, Md.					
V-C 0-12-5 Fertilizer (5169)	12.05	12.00	*4.72	5.00	-----
V-C 0-12-5 Fertilizer (5666)	12.16	12.00	5.91	5.00	-----
V-C 0-12-5 Fertilizer (6037)	12.04	12.00	5.02	5.00	-----
V-C 0-14-6 Fertilizer (5307)	14.84	14.00	6.11	6.00	-----
V-C 0-14-6 Fertilizer (5851)	14.96	14.00	6.50	6.00	-----
YORK CHEMICAL WORKS, York, Pe.					
Dempwolf's 0-10-10 (5627)	10.61	10.00	10.52	10.00	-----
Dempwolf's 0-12-5 (5433)	12.70	12.00	5.00	5.00	-----
Dempwolf's 0-12-5 (5628)	12.01	12.00	5.42	5.00	-----
Dempwolf's 0-14-6 (5642)	14.58	14.00	6.64	6.00	-----
Dempwolf's 0-14-6 (5795)	14.42	14.00	7.10	6.00	-----
YORK STONE & SUPPLY CO., York, Pe. Cramer's York 0-12-5 (5647)	12.98	12.00	6.10	5.00	-----
Average	14.87	-----	8.51	-----	-----

TABLE VII. MISCELLANEOUS FERTILIZERS

MANUFACTURER AND BRAND NAME	NITROGEN				PHOSPHORIC ACID				POTASH			
	Found		Guar.		Available		Insoluble		Found		Guar.	
	P. ct.	P. ct.	P. ct.	P. ct.	Found	P. ct.	Found	P. ct.	Found	P. ct.	Found	P. ct.
<u>NITRATE OF SODA</u> THE BARRETT COMPANY, New York, N. Y. Arcadian The American Nitrate of Soda (6088) CHILEAN NITRATE SALES CORPORATION, New York, N. Y. Champion Brand Chilean Nitrate of Soda (5274) Average	16.22	16.00	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	16.18	16.00	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	16.20	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	21.14	20.57	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	-----	-----	-----	-----	-----	-----	-----	-----	61.24	60.00	-----	-----
<u>SULPHATE OF AMMONIA</u> SAUGH & SONS COMPANY, Philadelphia, Pe. Sulphate of Ammonia (5216) <u>MURIATE OF POTASH</u> EASTERN STATES FARMERS' EXCHANGE, Springfield, Mass. Eastern States Muriate of Potash (5763) SWIFT & COMPANY FERTILIZER WORKS, Baltimore, Md. Swift's Muriate of Potash (5840) VIRGINIA-CAROLINA CHEMICAL CORPORATION, Baltimore, Md. Muriate of Potash (5696) Average	-----	-----	-----	-----	-----	-----	-----	-----	-----	48.00	-----	-----
	-----	-----	-----	-----	-----	-----	-----	-----	-----	50.45	50.00	-----
	-----	-----	-----	-----	-----	-----	-----	-----	-----	53.06	-----	-----
	6.76	5.75	10.30	9.00	-----	-----	-----	-----	-----	-----	-----	-----
	6.01	5.00	12.95	12.00	-----	-----	-----	-----	-----	-----	-----	-----
<u>TANKAGE</u> READING BONE FERTILIZER COMPANY, Reading, Pa. Animal Tankage (5084) UNITED HOME DRESSED MEAT COMPANY, Altoona, Pa. Dry Tankage (5697) Average	6.39	-----	11.63	-----	-----	-----	-----	-----	-----	-----	-----	-----
	6.29	6.00	-----	-----	2.16	2.00	-----	-----	-----	-----	-----	-----
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
<u>MISCELLANEOUS</u> SEWERAGE COMMISSION, Milwaukee, Wis. Milorgonite (6072) *Deficient	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

